S. HRG. 101-99

STATE ENERGY CONSERVATION PROGRAMS IMPROVEMENT ACT OF 1989

HEARING

BEFORE THE

SUBCOMMITTEE ON ENERGY REGULATION AND CONSERVATION

OF THE

COMMITTEE ON ENERGY AND NATURAL RESOURCES UNITED STATES SENATE

ONE HUNDRED FIRST CONGRESS

FIRST SESSION

ON

S. 247

TO AMEND THE ENERGY POLICY AND CONSERVATION ACT TO INCREASE THE EFFICIENCY AND EFFECTIVENESS OF STATE ENERGY CONSERVATION PROGRAMS CARRIED OUT PURSUANT TO SUCH ACT, AND FOR OTHER PURPOSES

MAY 2, 1989

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STATE ENERGY CONSERVATION PROGRAMS IMPROVEMENT ACT OF 1989

TUESDAY, MAY 2, 1989

U.S. SENATE,
SUBCOMMITTEE ON ENERGY REGULATION AND CONSERVATION,
COMMITTEE ON ENERGY AND NATURAL RESOURCES,
Washington, DC.

The subcommittee met, pursuant to notice, at 2:15 p.m. in room SD-366, Dirksen Senate Office Building, Hon. Howard M. Metzenbaum, presiding.

OPENING STATEMENT OF HON. HOWARD M. METZENBAUM, U.S. SENATOR FROM OHIO

Senator METZENBAUM. It has been over a decade since the energy crisis of the 1970s, but the threat of new crises remains. Oil import dependence will soon surpass the levels experienced in the 1970s, and at the rate we are going we will pass the 50 percent threshold for the first time.

At the same time, we are reminded of the tremendous environmental costs of unchecked energy consumption from the catastrophe in Alaska's Prince William Sound to the growing problem of global warming.

While Congress often has difficulty agreeing on a coherent set of responses to these threats, one response does have broad support: increasing energy conservation and energy efficiency.

In 1974 Congress authorized several programs which provide Federal grants to State and local governments for specified energy activities known collectively as the State and Local Assistance or SLAP Programs. What a terrible acronym that is, SLAP.

In doing so, Congress recognized the essential constitutional role of states and communities in promoting Intelligent energy planning and reducing the nation's rising level of energy consumption. With this assistance, the states have made significant strides in conserving energy despite repeated attempts by the Reagan Administration to eliminate all funding.

The Weatherization Program provides money and assistance to improve the homes of low income families who spend an inordinate share of their income on heating and cooling bills. The State Energy Conservation Program allows states to develop energy conservation goals and plans for meeting their targets and to get prepared for any future energy emergencies.

The Institutional Conservation Program offers much needed matching grants to schools and hospitals for conservation invest-

ments that help reduce their cost in providing education and health services.

Finally, the Energy Extension Service helps educate consumers about the most economical use of energy alternatives.

The programs have been successful, but that is part of our hearing today. Part of our hearing and certainly not an insignificant part is to learn from today's witnesses the degree of success, whether we are getting full value for the dollars we are spending.

We have learned a great deal about energy conservation programs and technologies, and individual states have developed new and innovative approaches to energy conservation; but we need to know more about what you are doing. We now need to update the SLAP programs to incorporate your successful approaches.

Yes, we would like to know where you have successfully endeavored to cope with the problem. As of this moment it would appear the monies have been wasted, but at least we would like to know the facts.

I introduced the legislation we are considering today, S. 247, to help reinvigorate the SLAP programs. This legislation would improve the legislation of these programs by incorporating many lessons learned over the past 15 years. I am pleased that Representative Phil Sharp has introduced identical legislation in the House.

Many new and innovative energy conservation activities which are not explicitly authorized have more recently been implemented by various states. The states would like authority to use their Federal dollars for these new programs which include statewide least cost energy planning, financing for capital investments and energy efficiency, and conservation activities—energy audits to help business and industry cut energy consumption and costs, promotion of the use of alternative transportation fuels, an adoption of energy efficiency rating systems for homes—and thus help consumers to make wise financial decisions.

The bill would also promote coordination between Federal, State and local institutions which often operate similar conservation programs. The bill establishes a State energy advisory board to promote communication among states and to advise the Department of Energy on energy issues.

Finally, the bill would establish new energy conservation goals for the states to replace those which recently expired.

Energy conservation remains a powerful tool to respond to a variety of national problems from national security to global warming. The SLAP programs and this legislation are important parts of strengthening the effectiveness of energy conservation.

I look forward to hearing from our witnesses today. I am asking that their comments be limited to no more than five minutes.

Our first witness today is the Honorable John R. Berg, Assistant Secretary, Conservation and Renewable Energy of the U.S. Department of Energy, accompanied by Frank Stewart, Director of the Office of State and Local Programs, the Department of Energy.

We are happy to have both of you with us.

[The prepared statement of Senator Wirth and the text of S. 247 follow:]

STATEMENT OF THE HONORABLE TIMOTHY E. WIRTH
MAY 2, 1989
ON S. 247

Mr. Chairman, I am pleased to be able to join you today. This legislation may be the first energy-efficiency bill to work its way out of this committee during the 101st Congress. And there are several reasons why.

First, this is a sound piece of legislation. The State and Local Energy Assistance Programs at the Department of Energy have served the nation well for more than a decade. But the time is right to revisit the work done in past Congresses and to update these programs so they reflect the lessons we have learned over the years. The state energy programs are the testing grounds, the front-lines of the public sector's efforts to help this nation use its energy resources more prudently. They must be up-to-date and increasingly ambitious.

The need for these programs is great. The nation's and the world's priorities are changing very rapidly. As Yogi Berra used to say "it's deja vu all over again." The United States is becoming increasingly dependent on foreign oil. Concurrently, we have became complacent about energy efficiency when the gas lines gave way to the oil glut. As a result, there have been virtually no gains in U.S. energy efficiency for three years. In fact, when the final numbers on 1988 are in, I believe we will find that we have slipped backwards.

The results of this slowdown are beginning to be felt in our trade deficit, in our international competitiveness and elsewhere in our economy. Most importantly, however, this unacceptable decline in efficiency runs counter to what must be one of the top, if not preeminent, goal of public policy in this and other nations -- the enormous environmental crisis we face.

The threat of profound environmental degradation has become one of the greatest challenges confronting our citizens. The American public and other citizens around the world are deeply troubled by the growing evidence of strain on the environmental systems around the globe. We in this committee have an opportunity, indeed a responsibility, to address these problems. And we can begin by enacting this sensible legislation.

In developing policy responses to this enormous and pressing challenge, energy efficiency must be our top priority. Any way you look at it, producing more energy services with less energy is good public policy. In that effort, it is imperative that we provide state and local governments, schools, hospitals and low-income households with the tools that they need to renew this nation's commitment to energy conservation. That is why I included the provisions of S. 247 in the omnibus global warming legislation I introduced with 33 of my colleagues.

While I fully support this legislation, I have been looking for additional opportunities. I intend to offer several amendments to the bill when it is considered by the full committee. Most importantly, I would like to offer two new optional program objectives that would encourage state energy offices to promote energy efficiency in state economic development programs and to incorporate energy efficiency into environmental protection strategies at the state level.

Second, as Chairman of the Alliance to Save Energy, I urge the committee not repeal the Performance Fund for state weatherization programs. This is a common-sense provision that rewards those states the run the most effective weatherization programs. The Alliance helped craft that provision and it should be maintained. Although this concept has never been tested because the budget priorities of the past Administration never allowed federal weatherization funds to exceed $200 million, it remains sound policy. Its goal, simply stated, is to give states an incentive to run lean, efficient weatherization programs by rewarding those states that achieve the greatest performance in weatherizing homes.

Third, I think more can be done to recognize the regional needs of certain regions of the country in these programs. Many states are more in need of programs to encourage efficiency in cooling homes. Unfortunately, our legislation does not give states the clear authority to aggressively reduce cooling energy use. The technology is available now for deployment and we should make this minor change in language.

Fourth, we need to set another priority for our weatherization programs. Commendably, Mr. Chairman, S. 247 sets as priorities for weatherization homes of the elderly and handicapped. I believe we should expand this provision to give priority as well to high energy using households, which are most often occupied by the poorest of the poor -- single women with dependent children.

Finally, I recommend that we add a new subsection that would encourage the Department of Energy to develop a uniform method of analyzing the strengths and weaknesses of state weatherization programs. It simply makes good sense for state as well as the federal government to evaluate its work and improve the provision of services.

Mr. Chairman, your leadership has been instrumental to the current surge in attention to energy efficiency in all segments of the U.S. economy. These efforts come none too soon given the enormous energy, economic and environmental threats that loom over us because we have fallen behind in getting more out of less energy. I look forward to working with you to pass this bill and I hope that we can work together to make this the best possible bill when it moves out of the Energy Committee. Thank you very much.

# # #

II

101ST CONGRESS
1ST SESSION

S. 247

To amend the Energy Policy and Conservation Act to increase the efficiency and effectiveness of State energy conservation programs carried out pursuant to such Act, and for other purposes.

IN THE SENATE OF THE UNITED STATES

JANUARY 25 (legislative day, JANUARY 3), 1989

Mr. METZENBAUM introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

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A BILL

To amend the Energy Policy and Conservation Act to increase the efficiency and effectiveness of State energy conservation programs carried out pursuant to such Act, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be referred to as the "State Energy Conservation Programs Improvement Act of 1989".

SEC. 2. STATE ENERGY CONSERVATION GOALS.

Section 364 of the Energy Policy and Conservation Act (42 U.S.C. 6324) is amended to read as follows:

"ENERGY CONSERVATION GOALS

"SEC. 364. Each State energy conservation plan with respect to which assistance is made available under this part on or after October 1, 1990, shall contain a goal consisting of a reduction, as a result of the implementation of such plan, of 10 percent or more in the amount of energy consumed in such State in the year 2000 from the projected energy consumption, as of October 1, 1990, for such State in the year 2000.".

SEC. 3. REQUIRED STATE ENERGY CONSERVATION PLAN ELEMENTS AND CONSOLIDATION OF ENERGY EXTENSION SERVICE.

(a) IN GENERAL.—Section 362(c) of the Energy Policy and Conservation Act (42 U.S.C. 6322(c)) is amended—

(1) by striking "and" at the end of paragraph (4);

(2) by striking the period at the end of paragraph (5) and inserting in lieu thereof a semicolon; and

(3) by adding at the end thereof the following new paragraphs:

"(6) an energy emergency planning program for an energy supply disruption which shall include a specific implementation strategy and regional coordination and may include planning for petroleum, electricity, natural gas, coal, and nuclear power supply and delivery disruptions;

"(7) procedures for ensuring that effective coordination exists among various local, State, and Federal energy conservation programs within the State, including any program administered within the Office of State and Local Assistance Programs of the Department of Energy as of December 31, 1987, and the Low Income Energy Assistance Program administered by the Department of Health and Human Services; and

"(8) programs to implement all the functions of the Energy Extension Service, as provided by law on the day before the date of enactment of the State Energy Conservation Programs Improvement Act of 1989, which shall—

"(A) include programs for identification, development, and demonstration of energy efficiency opportunities, techniques, methods, materials, and equipment (including those that are responsive to local needs or resources) and alternative energy technologies such as solar heating and cooling for agricultural, commercial, and small business operations, individual energy consumers, and new and existing residential, commercial, and agricultural buildings or structures;

"(B) provide for technical assistance, instructions, information dissemination, and practical demonstrations with respect to energy efficiency opportunities;

"(C) provide, to the maximum extent practicable within personnel and funding limitations, active outreach energy extension assistance (including information on end-user technology requirements) at the local level through appropriate offices (including metropolitan offices) and through county agents and technical staff assistance;

"(D) make maximum use of existing outreach or delivery mechanisms or programs and include, to the maximum extent practicable, any State, local, university, college, or other organization's programs for energy information, education, or technology transfer which have activities or purposes similar to those of this part; and

"(E) establish and implement policies and procedures designed to assure that assistance provided under this part does not replace or supplant the expenditure of other Federal or State or local funds for the same purposes, but instead supplements such funds and increases the expenditure of

such State or local funds to the maximum extent practicable.".

(b) ELIMINATION OF EES.—The National Energy Extension Service Act (title V of Public Law 95–39) is repealed.

SEC. 4. OPTIONAL STATE ENERGY CONSERVATION PLAN ELEMENTS AND CONSOLIDATION OF SUPPLEMENTAL STATE ENERGY CONSERVATION PLAN.

(a) IN GENERAL.—Section 362(d) of the Energy Policy and Conservation Act (42 U.S.C. 6322(d)) is amended—

(1) by striking "and" at the end of paragraph (4);

(2) by striking the period at the end of paragraph (5) and inserting in lieu thereof a semicolon; and

(3) by adding at the end thereof the following new paragraphs:

"(6) programs for financing energy efficiency and renewable energy capital investments, projects, and programs—

"(A) which may include loan programs and performance contracting programs for leveraging of additional public and private sector funds, and programs which allow rebates, grants, or other incentives for the purchase and installation of energy efficiency and renewable energy measures; or

"(B) in addition to or in lieu of programs described in subparagraph (A), which may be used in connection with public or nonprofit buildings owned and operated by a State, a political subdivision of a State or an agency or instrumentality of a State, or an organization exempt from taxation under section 501(c)(3) of the Internal Revenue Code of 1986;

"(7) programs to increase transportation energy efficiency, including programs to accelerate the use of alternative transportation fuels for State government vehicles, fleet vehicles, taxis, mass transit and privately owned vehicles;

"(8) programs for encouraging and for carrying out energy audits with respect to buildings and industrial plants within the State;

"(9) programs to promote the adoption of integrated energy plans which provide for—

"(A) periodic evaluation of a State's energy needs, available energy resources (including greater energy efficiency), and energy costs; and

"(B) utilization of reliable energy supplies, including greater energy efficiency, that meet applicable safety, environmental, and policy requirements at the lowest cost;

"(10) programs to promote energy efficiency in residential housing, such as—

"(A) programs for development and promotion of energy efficiency rating systems for newly constructed housing and existing housing so that consumers can compare the energy efficiency of different housing; and

"(B) programs for the adoption of incentives for builders, utilities, and mortgage lenders to build, service, or finance energy efficient housing; and

"(11) programs to protect consumers from any unfair or deceptive acts or practices which relate to the implementation of energy efficiency measures and renewable resource energy measures.".

(b) ELIMINATION OF SSECP.—Section 367 of the Energy Policy and Conservation Act (42 U.S.C. 6327) is repealed.

SEC. 5. AUTHORIZATION OF APPROPRIATIONS.

(a) STATE PLAN PROGRAM.—Section 365(f) of the Energy Policy and Conservation Act (42 U.S.C. 6325(f)) is amended to read as follows:

"(f) For the purpose of carrying out this part, there are authorized to be appropriated $25,000,000 for fiscal year

1990, $35,000,000 for fiscal year 1991, and $45,000,000 for fiscal year 1992.".

(b) ENERGY CONSERVATION PROGRAM FOR SCHOOLS AND HOSPITALS.—Section 397 of the Energy Policy and Conservation Act (42 U.S.C. 6371f(a)) is amended to read as follows:

"AUTHORIZATION OF APPROPRIATIONS

"SEC. 397. For the purpose of carrying out this part, there are authorized to be appropriated $40,000,000 for fiscal year 1990, $50,000,000 for fiscal year 1991, and $60,000,000 for fiscal year 1992.".

(c) WEATHERIZATION ASSISTANCE PROGRAM.—Section 422 of the Energy Conservation and Production Act (42 U.S.C. 6872) is amended to read as follows:

"AUTHORIZATION OF APPROPRIATIONS

"SEC. 422. There are authorized to be appropriated for purposes of carrying out the weatherization program under this part $200,000,000 for fiscal year 1990 and such sums as may be necessary for 1991 and 1992.".

SEC. 6. STATE ENERGY ADVISORY BOARD.

Section 365 of the Energy Policy and Conservation Act (42 U.S.C. 6325) is amended by adding at the end the following:

"(g)(1) There is hereby established within the Department of Energy a State Energy Advisory Board (hereafter in this subsection referred to as the 'Board') which shall consist

of not less than 10 nor more than 15 members appointed by the Secretary. Not less than one-half of the members of the Board shall be persons who serve as directors of the State agency, or a divison of such agency, responsible for developing State energy conservation plans pursuant to section 362. At least one member of the Board shall be a director of a State weatherization assistance program. Other members shall be appointed from other persons, including those who have experience in energy efficiency or renewable energy programs for the private sector, consumer interest groups, utilities, public utility commissions, educational institutions, or research institutions.

"(2) The Board shall—

"(A) make recommendations with respect to the energy efficiency objectives of the programs carried out under this part, part G of this title, and under part A of title IV of the Energy Conservation and Production Act to the Assistant Secretary for Conservation and Renewable Energy, the Director of the Office of State and Local Assistance Programs, and the Director of the Building and Community Systems Office within the Department of Energy;

"(B) serve as a liaison between the States and such Department on energy efficiency and renewable energy resource programs;

"(C) recommend changes to State and Federal energy policies; and

"(D) encourage technology transfer of the results of research and development activities carried out by the Federal Government with respect to energy efficiency and renewable energy resources.

"(3) The Secretary shall designate one of the members of the Board to serve as its chairman and one to serve as its vice-chairman. The chairman and vice-chairman shall serve in those offices no longer than two years.

"(4) The Secretary shall provide the Board with such services and facilities as may be necessary for the performance of its functions.

"(5) The Board shall be nonpartisan.

"(6) The Board may adopt administrative rules and procedures and may elect one of its members Secretary of the Board.

"(7) The Secretary shall reimburse members of the Board for expenses (including travel expenses) necessarily incurred by them in the performance of their duties.

"(8) The Board shall meet at least annually and shall submit an annual report to the Secretary and the Congress on the activities carried out by the Board in the previous fiscal year, including any recommendations it may have for administrative or legislative changes.".

SEC. 7. UPDATE OF ENERGY CONSERVATION PROGRAM FOR SCHOOLS AND HOSPITALS.

(a) NON-FEDERAL SHARE OF A PROJECT.—Section 396(b)(1) of the Energy Policy and Conservation Act (42 U.S.C. 6371e(b)(1)) is amended by adding at the end thereof the following: "The non-Federal share of the costs of any such energy conservation project may be provided by using programs of innovative financing for energy conservation projects, including loan programs and performance contracting.".

(b) DEFINITION.—Section 391(l) of such Act (42 U.S.C. 6371(1)) is amended by striking "April 20, 1977" and inserting in lieu thereof "December 31, 1984".

SEC. 8. WEATHERIZATION ASSISTANCE FOR LOW-INCOME PERSONS.

(a) WAIVER OF 40-PERCENT REQUIREMENT.—Section 415(a) of the Energy Conservation and Production Act (42 U.S.C. 6865(a)) is amended—

(1) in the first sentence, by striking "An average" and inserting in lieu thereof "(1) Except as provided in paragraph (2), an average"; and

(2) by adding at the end the following:

"(2)(A) The Secretary may approve a State application to waive the 40-percent requirement established in paragraph (1) if the State includes in the State's plan—

"(i) an energy evaluation which establishes priorities for selection of weatherization measures based on their contribution to energy efficiency; and

"(ii) a standard for determining whether to invest in individual measures based on a rate of return that will ensure that investment in each measure is an appropriate use of funds.

"(B) For States applying for a waiver under this paragraph, the Secretary shall establish standards for determining whether the energy audit techniques of each such State measure—

"(i) the energy requirements of individual dwellings;

"(ii) the rate of return of each conservation investment; and

"(iii) the interaction between conservation measures.

State applications for waivers shall be judged on these standards.

"(C) The Secretary shall make information on energy evaluation instruments available to States applying for a waiver under this paragraph and shall provide training for State and local agencies in the implementation of such instruments.".

(b) DWELLING UNIT LIMITATION.—Section 415(c) of such Act (42 U.S.C. 6865(c)) is amended—

(1) in paragraph (1), by striking "The expenditure" and inserting in lieu thereof "Except as provided in paragraphs (3) and (4), the expenditure"; and

(2) by adding at the end thereof the following new paragraphs:

"(3) Beginning with fiscal year 1990, the $1,600 per dwelling unit limitation provided in paragraph (1) shall be adjusted annually by increasing the limitation amount by an amount equal to the percentage increase in the Consumer Price Index for the previous fiscal year multiplied by the limitation amount for such previous fiscal year. The increase under the preceding sentence for any fiscal year shall not exceed 3 percent.

"(4)(A) In addition to the average per dwelling unit limitation applicable in a State under paragraphs (1) and (3), the Secretary may, upon application by a State, establish an average per dwelling unit limitation for dwelling units in such State—

"(i) which conform to program requirements;

"(ii) which, in addition to any other weatherization modifications, have furnace efficiency modifications made under this part; and

"(iii) for which a determination is made pursuant to regulations prescribed by the Secretary that such furnace efficiency modifications are a cost-effective use of funds.

"(B) The average per dwelling unit limitation applicable in a State to units described in subparagraph (A) shall not exceed an amount equal to—

"(i) the amount permitted for the expenditure of financial assistance for labor, weatherization materials, and related matters for dwelling units in such State under paragraphs (1) and (3), plus

"(ii) an amount determined by the Secretary to be the average amount that is appropriate for furnace efficiency modifications of dwelling units of the type assisted under this part in such State.".

(c) REPEAL OF PERFORMANCE FUND.—Section 415(d) of such Act (42 U.S.C. 6865(d)) is repealed.

○

STATEMENT OF DR. JOHN R. BERG, ASSISTANT SECRETARY, CONSERVATION AND RENEWABLE ENERGY, DEPARTMENT OF ENERGY, ACCOMPANIED BY FRANK M. STEWART, DIRECTOR, OFFICE OF STATE AND LOCAL PROGRAMS, DEPARTMENT OF ENERGY

Dr. BERG. Thank you very much, Mr. Chairman. We do offer our testimony to be put in the record, and, if I might, we would like to summarize it, please.

As you mentioned, I am accompanied today by Mr. Frank Stewart, the Director of our State and Local Assistance Programs.

We appreciate this opportunity to appear before you today to discuss the Department of Energy's views on S. 247, the State Energy Conservation Programs Improvement Act of 1989.

Conservation and energy efficiency are critical components of our national energy resources. Secretary Watkins has stated repeatedly his commitment to conservation as an important part of the portfolio of technologies required to meet our economic energy and environmental objectives. We are moving as quickly as possible to translate that leadership into cogent and well articulated policies, programs and strategies; these will form the framework within which the Department, the Congress, the State and local governments and the individual energy suppliers and consumers can take appropriate action to meet their respective responsibilities.

Before I refer directly to the bill, let me make a few observations about the direction of our State and Local Assistance Programs. These programs were established 15 years ago as part of the Federal response to the OPEC oil embargo. Today our quest for energy efficiency is driven as much by the desire to save money or to lessen the environmental impacts of energy production as it is by the danger of another oil cutoff.

Our notion of the proper Federal role in this process has also evolved over time. The proper Federal role, I would suggest, is to act as a broker to the States, not just of money, but of ideas—to encourage a dialogue that will help identify successful and innovation conservation initiatives as they emerge at the State, local or even the international level and then to provide the information and technical assistance needed to replicate them elsewhere.

The time is also ripe for a reassessment of the Federal effort in weatherization. If Congress is committed to spending $160 million per year on this program, how can that money be best spent? How can we ensure that the benefits are real and long lasting and that they reach the intended target? How can weatherization programs best be integrated with a Low-Income Home Energy Assistance Program is order to maximize its impact? I raise these questions not because I have the answers but because I believe they are worthy of examination and discussion before we reauthorize this program. Let us work together to make these programs work better.

I will now turn my attention to the specific provisions of S. 247, as currently drafted.

Section 2 proposes to set uniform State energy conservation goals. We believe that a goal of a 10 percent reduction in energy

consumption for each State by the year 2000 is unrealistic and without full and specific consideration of the special circumstances of each State; therefore, it would be unreasonable and counterproductive.

Regarding Section 3, the Department is opposed to the inordinate restriction of a State's prerogative in addressing its own needs. We favor the providing of general guidance in permitting the maximum flexibility of a state in defining and designing the means to meet our common objectives.

We believe that the goal of great energy efficiency would be better served by the elimination of mandatory provisions. We object to the provisions of requiring an energy emergency plan as part of the energy conservation plan. We would suggest that any requirement for energy emergency planning not be subsumed in the State's energy conservation plan, but that the State be allowed the flexibility to develop its energy emergency plan as part of its other emergency planning or as free-standing document.

We agree with the provision calling for the elimination of the Energy Extension Service. Much of the work of the service has been done in conjuction with the State Energy Conservationa Program, and there should be little difficulty in combining all the function into the State Energy Conservation Program.

Section 4 lists several programs that the States would be allowed to undertake. This list in large measure gives the States more flexibility and would likely strengthen the program. However, we recommend that the allowance in subsection (11), of the programs to protect consumers from unfair or deceptive practice, be stricken. This assignment belongs to the States' Attorneys General.

Regarding authorization of appropriations covered in Section 5, we would like to work with the committee in reexamining the fundamental structure of these programs. This process must precede a determination of the appropriate authorization levels.

Regarding the State Energy Advisory Board In Section 6, the Department believes that the advisory board would be of greater use if it more fully reflected the public being served by the programs and did not duplicate the interaction with the State energy officials, which should exist as a matter of course.

We recommend that the board be composed of a minimum of 15 members and not more than 20 and that it meet three times a year and that no more than one-quarter of the membership consist of directors of the State agencies responsible for developing State energy conservation plans.

Regarding Section 7, we believe these new provisions would increase the flexibility provided to the States to make the best use of the resources available to them, increase the degree of competition among the schools and hospitals participating in the program, and permit the States to take advangage of many energy conservation financing techniques.

We believe the modification that Section 8 makes in the Low Income Weatherization Assistance Programs failed to go far enough to correct the identified concerns. We suggest elimination of the requirement that 40 percent of the weatherization funds be used for the purchase of materials and request in its place the re-

quirement that the States report their average materials and labor costs.

We believe that the dollar limit in the average cost per dwelling unit should be eliminated as a National determination, and each State should be allowed to establish those limits to make the best sense for the housing stock, climate and materials or appliances for fuels available within the State. We believe instead that the State should be asked to report periodically on the average cost of weatherizing individual dwelling units.

Finally, the Department has no objection to the provisions repealing the Performance Fund.

Mr. Chairman, I wish to reiterate the commitment of the Department and the Administration to conservation. While we cannot support S. 247 as currently drafted, we believe that further discussion could lead to mutually supported legislation, and we want to work with the committee to achieve these objectives.

This concludes my prepared remarks. Thank you.

[The prepared statement of Mr. Berg follows:]

STATEMENT OF

DR. JOHN R. BERG

ASSISTANT SECRETARY

FOR

CONSERVATION AND RENEWABLE ENERGY

U. S. DEPARTMENT OF ENERGY

BEFORE THE

COMMITTEE ON ENERGY AND NATURAL RESOURCES

SUBCOMMITTEE ON ENERGY REGULATION AND CONSERVATION

UNITED STATES SENATE

MAY 2, 1989

Mr. Chairman and Distinguished Members of the Subcommittee:

Thank you for the opportunity to appear before you today to share the views of the Department of Energy concerning S. 247, the "State Energy Conservation Programs Improvement Act of 1989."

Conservation and energy efficiency are critical components of our National energy resources. Secretary Watkins, in his first months in office, has stated repeatedly his commitment to conservation as an important part of the portfolio of technologies required to meet our economic, energy, and environmental objectives. We are moving as quickly as possible to translate that leadership into cogent and well articulated policies, programs, and strategies; these will form the framework within which the Department, the Congress, State and local governments, and individual energy suppliers and consumers can take appropriate action to meet their respective responsibilities.

The availability, cost, security, reliability, safety, and environmental impact of energy supply and use are fundamental to the strategic interests of the Nation. They affect our competitiveness, productivity, security, and environmental quality. Over the past two decades, conservation has emerged as a major domestic and international resource, making inroads into virtually every energy production and demand sector, improving the efficiency with which all fuels are used, and providing powerful impetus to expansion of the domestic economy. Since the energy crisis of the early seventies, the Nation has made great progress in reducing the amount of energy we need to produce a

dollar of gross national product (GNP). While GNP has increased about 40 percent, energy consumption has remained relatively constant. However, conservation has not approached its full economic or technical potential, and properly focused Federal efforts can help in sustaining and building upon past achievements and current practice.

I am here today to comment on S. 247, but before I refer directly to the bill, let me begin with a few general observations about the direction of our State and Local Assistance Programs. These programs were established 15 years ago, as part of the Federal response to the OPEC oil embargo. Since that time, much has changed. Many millions of dollars have been spent, and many gains have been made. Today our quest for energy efficiency is driven as much by the desire to save money or to lessen the environmental impacts of energy production as it is by the danger of another oil cutoff. Our notion of the proper Federal role in this process has also evolved over time.

The time has come, in our judgment, for a more fundamental reshaping of the Federal effort in this area than is contemplated in S. 247. Just as our goal in energy conservation must be to do more with less -- to get more heat, more light, more output with less energy -- so, too, must our Federal goal also be to do more with less -- to get more energy conservation and efficiency with less Federal involvement.

To do that, let us start with the recognition that energy conservation pays. When implemented in a cost-effective way, it results in direct savings to the consumer in the form of lower utility bills. It also reduces the need for

additional, often very expensive energy production by the utility. These facts have been used by the States in a variety of innovative ways. In some States, public utility commissions have encouraged or even forced utilities to implement conservation measures as a least-cost approach to the need for additional capacity. In other States, shared energy savings programs have been implemented, reducing the initial capital costs of conservation measures to the consumer in exchange for a share of the savings in utility bills. States like Iowa, Montana, and Oregon have taken the lead in replacing public with private financing in this area, and Texas has created a self-sustaining $200 million revolving fund for this purpose. The enormous sums of money transferred to the States through the oil overcharge program have provided and will continue to provide ample resources with which to take such steps.

These actions suggest that the need for direct Federal grants to the States for energy conservation measures is much reduced. The proper Federal role, I would suggest, is to act as a broker to the states, not just of money, but of ideas -- to encourage a dialogue that will help identify successful and innovative conservation initiatives as they emerge at the State or local or even international level, and then to provide the information and technical assistance needed to replicate them elsewhere.

The time is also ripe for a reassessment of the Federal effort in weatherization. If Congress is committed, as it has been in the past, to spending $160 million a year on this program, how can that money be best spent? How can we ensure that the benefits are real and long-lasting and that

they reach the intended target? How can the Weatherization Assistance Program best be integrated with the Low-Income Home Energy Assistance Program in order to maximize its impact? I raise these questions not because I have the answers, but because I believe they are worthy of examination and discussion before we reauthorize this program. I offer the Committee, as President Bush did in his Inaugural Address, an open hand -- "a new engagement...between the Executive and the Congress." Let us work together to make these programs work better.

I will now turn my attention to the specific provisions of S. 247, as currently drafted.

Section 2 proposes to set uniform State energy conservation goals. We believe that the goal of a 10 percent reduction in energy consumption for each State by the year 2000 is unrealistic and, without full and specific consideration of the special circumstances of each State, is unreasonable and counterproductive. Those States that will, within the next ten years, have to contend with declining population, economic recession, or economic dislocation might find such a goal easy to meet. On the other hand, the rapidly growing population and economies of other States may make it impossible for them to meet consumption reductions of that magnitude.

Section 3 expands the mandatory provisions that exist in the present law. The Department is opposed to the inordinate restriction of a State's prerogatives in addressing its own needs; we favor providing general guidance and permitting the maximum flexibility to the State in defining and designing the

means to meet our common objectives. We believe that the goal of greater energy efficiency would be better served by the elimination of the mandatory provisions. For example, while we agree that the States should be encouraged to coordinate with similar programs in-State as well as with other States, we cannot support the provision that requires the establishment of procedures for "effective" intrastate coordination of State, Federal and local energy conservation programs -- along with the Federal review of such procedures that would be required to ensure compliance.

For different reasons, we object to the provision requiring an energy emergency plan as part of the energy conservation plan. We would suggest that any requirement for energy emergency planning not be subsumed in the State's energy conservation plan, but that the State be allowed the flexibility to develop its energy emergency plan as part of its other emergency planning or as a free-standing document. It would be more appropriate to require an energy emergency planning program as a prerequisite for eligibility for receipt of funds under this authorization.

We agree with the provision calling for the elimination of the Energy Extension Service. Much of the work of the Service has been done in conjunction with the State Energy Conservation Program, and there should be little difficulty in combining all the functions into the State Energy Conservation Program.

Section 4 lists several programs that the States would be allowed to undertake. This list, in large measure, gives the States more flexibility and would likely strengthen the program. However, the allowance in subsection (11) of programs to protect consumers from unfair or deceptive practices strays far afield, into an open-ended area only peripherally related to energy conservation, possibly including, for example, the financing of class-action lawsuits by consumer action groups. The section should be stricken. The consumer protection envisioned in this language more appropriately rests in programs already established elsewhere within State and Federal government.

The authorization of appropriations is covered in Section 5. As previously noted, we would like to work with the Committee in re-examining the fundamental structure of these programs. This process must precede a determination of appropriate authorization levels.

Section 6 establishes a State Energy Advisory Board heavily weighted toward the directors of state energy agencies. The Department believes that consultation with such agencies should be a frequent and routine part of the administration of these programs, involving issues of program operation, program policies, the identification of State needs for technical assistance and training, program guidance, and individual energy consumer needs. Accordingly, we believe the advisory board would be of greater use to the Department if it more fully reflected the public being served by the programs and did not duplicate the interaction which should exist as a matter of course. We recommend that the board be composed of a minimum of 15 members and not more than 20, that it meet three times a year, and that no more than

one-quarter of the membership consist of directors of the State agencies responsible for developing State energy conservation plans.

Section 7 establishes broader eligibility requirements for buildings participating in the Institutional Conservation Program. We believe these new provisions would increase the flexibility provided to the States to make the best use of the resources available to them, increase the degree of competition among the schools and hospitals participating in the program, and permit the States to take advantage of the new energy conservation financing techniques that have proven successful in many applications across the Nation.

We believe that the modifications that Section 8 makes in the Low Income Weatherization Assistance Program fail to go far enough to correct the identified concerns. We suggest elimination of the requirement that 40 percent of weatherization funds be used for the purchase of materials, and request in its place a requirement that the States report their average material and labor costs. Although the original objective of this provision was to ensure that a reasonable level of materials would be installed in a weatherized dwelling, the actual experience in implementing this provision has been fraught with administrative and managerial difficulties. Elimination of this requirement would be hailed by the vast majority of the weatherization providers as relieving them of an unnecessary burden and improving their ability to effectively manage their programs. Additionally, Federal case-by-case review of requests for modification of any requirement leads inevitably to delays in implementation, increased bureaucracy, and increased administrative expenses.

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We believe that the dollar limit in the average cost per dwelling unit should also be eliminated as a National determination, and each State should be allowed to establish those limits that makes the best sense for the housing stock, climate, and materials or appliances or fuels available within the State. We believe instead that the States should be asked to report periodically on the average costs of weatherizing individual dwelling units under their programs.

The Department has no objection to the provision in Section 8 repealing the Performance Fund. Although laudatory in concept, the Fund has never been implemented.

In conclusion, I wish to reiterate the commitment of the Department and the Administration to conservation; it is a domestic energy resource that must be used as surely as our vast reserves of coal. While we cannot support S. 247 as drafted, we believe that further discussion could lead to mutually supported legislation, and we want to work with the Committee to achieve that objective.

Mr. Chairman, this concludes my prepared remarks; I appreciate the opportunity to appear here today, and I am prepared to address your questions at this time.

Senator METZENBAUM. Thank you, Dr. Berg.

Dr. Berg, on a scale of one to 10, how would you feel that these energy conservation programs have worked over the last 15 years or the last eight years? I will put it that way.

Dr. BERG. How would I view how the conservation program worked on what?

Senator METZENBAUM. How would you evaluate the programs that we are reauthorizing here during the eight years and maybe the previous seven as well?

Dr. BERG. I think, like everything, sir, there are some that are very good in some areas and a little bit shaky in some other areas.

For instance, let us take the Institutional Conservation Program. For the most part, the programs in those areas, working with the schools and hospitals has provided a means by which we have seen a 50–50 co-financing, if you wish, of energy conservation and energy efficiency usage within those institutions.

Many of these institutions, particularly the universities and the hospitals, have energy engineers responsible for measurement of the energy usage. As a result, most of them have pretty good data as to what works and what does not work and why.

In many of the schools, it is kind of a mixed bag. Depending upon the school districts, some of them have worked together and have very good data, and others do not.

If we take a look at the Weatherization Program, we again have what I call a mixed bag. Some of the best areas that I have visited are those in some of our larger areas. Some of the worst ones have been in our larger areas.

A specific example of what I would call an excellent program is the City of Chicago, run by a director there that is a former contractor who knows the contracting business. Each year some 25 groups or so bid to weatherize homes in the city of Chicago.

More importantly, they have, on computer, records to show the energy savings that have resulted from the measures that have been installed. That type of program when it is working properly, I think, is well worth the money that has been spent on it. There are other areas, however, in which I do have concerns, and I would be happy to address those.

Senator METZENBAUM. Are you in a position to answer what the total energy savings of the four SLAP programs outlined in S. 247 could achieve?

Dr. BERG. No, sir, I am not. At this point much of it, unfortunately, tends to be estimated, and specific hard data is something that I have been trying to get some handles on. For instance, I have asked our Institutional Conservation Program to come up with a method by which they could actually detail more specifically, with the States, the results from these programs.

In our Weatherization Program, we had a contract this past year in which we asked the Alliance to Save Energy to go back and look at the energy savings five years after the installation of furnaces. That report is due very shortly. In essence, they showed that at the time furnaces were put on that on the average they were going to save the consumer roughly 30 percent in energy savings. Going back and looking at that data now, five years later, they still show

an energy savings. However, it has dropped by about one-third. In other words, there is a 20 percent savings.

Again, I think the reason why is most important——

Senator METZENBAUM. That is better than the budget estimates that we make around here. We do not even get that close.

Dr. BERG. The reasons why, on these things, I think, are important. Again, it depends on you and I, the consumers, going down and cleaning those furnaces out and keeping them tuned up. I think that is part of the reason the programs really need to be examined, and that is one of the reasons I have asked that in the coming year we go back and actually do a nationwide analysis in which we would go in on a random sampling basis in each of the States and examine weatherized homes in those States that would help us determine what measures are effective and why.

Senator METZENBAUM. Dr. Berg, you say that oil overcharge funds should provide ample resources for State energy conservation. I wonder first if you could tell me how much oil overcharge funding has been made available to the States so far and how much of the total is allocated to each of the four SLAP programs and how much remains to be allocated?

Dr. BERG. I think I can answer if you give me just a moment, sir.

We have run an item here. Taking Warner, there has been $200 million distributed on the Warner, $2,1 billion in Exxon, and $1,100,000,000 in Stripper Well. At the present time, allocated to the five programs, and I will count LIHEAP in this, out of the $200 million of the Warner, $197 million was allocated to the five programs, the four SLAP and the LIHEAP.

Of the $2.1 billion in Exxon, so far allocated to these programs has been $2,089,000,000. Of the Stripper Well, of $1,100,000,000, $333.9 million so far has been allocated to these programs and $569.4 has been allocated to other energy programs.

Senator METZENBAUM. Would you provide for the committee a breakup without the life allocations?

Dr. BERG. I would be happy to do that, sir.

[The information follows:]

STATE ALLOCATIONS OF OIL OVERCHARGE FUNDS TO SLAP PROGRAMS (AS OF MAY 1, 1989)

	Funding (millions)	Percent of total
Program:		
SECP	$775.2	39.3
EES [1]	137.2	6.9
WAP	673.4	34.1
ICP	389.5	19.7

[1] In some cases, EES allocations are reported in combination with SECP.

Senator METZENBAUM. As I understand it, the Department of Energy's position is that they support the legislation but it needs some modifications. Is that correct?

Dr. BERG. With modifications, we would support the bill.

Senator METZENBAUM. I thank you, Dr. Berg and Mr. Stewart. I thank you for being with us.

Our next panel consists of Mr. Henry Lee, Director of the Energy and Environmental Policy Center at Harvard; Ms. Cherry Duckett, Deputy Director of the Arkansas Industrial Development Corporation; Ms. Carol Tombari, Director of the Energy Management Center in Austin, Texas; Mr. William Concannon, Assistant Secretary, Executive Office of Communities and Development of Boston; and Mr. Fred Tucker, Executive Director of the Dixie Community Action Agency of Hugo, Oklahoma.

I think you all know our rules of a five-minute presentation. Your statement will be included in the record.

Mr. Lee, we would be happy to hear from you first.

STATEMENT OF HENRY LEE, EXECUTIVE DIRECTOR, ENERGY AND ENVIRONMENTAL POLICY CENTER, HARVARD UNIVERSITY

Mr. LEE. Thank you, Senator. My name is Henry Lee, and I welcome the opportunity to come before you this afternoon to testify on behalf of S. 247.

In recent years, State energy conservation programs have come on hard times. Even in those instances in which Congress has been able to restore funds for State programs, the threat of cutbacks in subsequent years has inhibited the ability of State officials to create any programmatic continuity. Very simply, we cannot develop an effective energy efficiency program if its life expectancy is totally uncertain.

This statement is especially valid for energy efficiency programs in which continuity is essential in order to develop markets for those programs and the infrastructure to deliver them.

In my prepared remarks I talk a little bit about the reasons we need a conservation program in this country and why State programs are important. I think you summed up, Senator, some of them in your description of the energy security problems.

It is also important to link these to the concerns about environment. As you well know, many of our problems relating to ozone, acid rain and the greenhouse warming or greenhouse effect are related to the combustion of fossil fuels, and there is direct linkage between energy efficiency improvements and environmental protection.

I think there are three questions the committee should consider. One is improved energy efficiency, a reasonable policy option for improving environmental quality. Second, why should State governments be given the responsibility for implementing efficiency programs. Third, what is the difference between the conservation programs that were effective in the 1970s and those that will be effective in the 1990s. Let me quickly summarize some answers to these.

First, in the area of efficiency, at first blush this is relatively simple to answer. Efficiency options do not admit air pollutants, toxic materials and water pollution. Further, they take up almost no land. Anybody who has tried to site a power facility and run into the very legitimate array of new air, water and land regulations is aware in what direction the winds of public policy are blowing.

Why State government? What constitutes an effective energy program will differ from one rejoin to another. The idea that there is a single efficiency program that is effective for the nation as a whole ignores reality. Furthermore, the Federal Government cannot design 50 separate energy efficiency programs. The only way one can develop programs which are sensitive to the requirements of each state is to have the state develop those programs.

If the state should design them, then why not let them pay for them? If the benefits could be contained within State borders, I would agree with that statement, but benefits from these efficiency programs would in large part accrue to the nation as a whole. The benefits of increased energy security will not be limited to a small number of states, and the benefits of reduced pollution will not remain localized.

At this stage I would like to offer some suggestions for bringing some of the programs contained in this legislation in line with the needs of the 1990s. I will limit my comments to programs and policies that relate to State governments, and I will try to be sensitive to the realities of the Federal budget, but I feel strongly that OMB and others must expand their time horizon and start realizing that failures to invest in the future could result in very high cost down the road.

I make the following recommendations. First, the committee should try to change the name of this bill to the State Energy Efficiency Program Improvements Act. The term "conservation" is a stark reminder of cardigan sweaters, low thermostat settings and gas lines and is a term that is not conducive to generate public support.

Second, to the extent possible, all existing State programs except the Low Income Weatherization Program should be consolidated into a single program, and I think the bill makes great strides in this direction.

Third, the energy conservation programs for schools, hospitals, local governments and public care institutions should eventually be phased out. While this program has been successful in the past, the rationale for singling out these institutions for special attention is no longer relevant. Programs to assist schools and hospitals should be treated in the same way that we treat programs focusing in other institutions. If a dollar invested in reducing energy use in a school building is the most cost effective option, then states should spend that dollar accordingly. If not, then it makes no sense to require them to make such investments.

There is a very substantial danger with this suggestion, and that is that the money now going to this specific program will simply be diverted away to nonenergy programs. There must be an agreement, therefore, between Congress and the executive branch that the funds now used for this program will be available to the states to be used for a broader spectrum of energy efficiency uses.

Fourth, in keeping with the theme of my comments I would suggest a tradeoff. In return for more flexibility for states, Congress should require the Department of Energy to develop an effective process for evaluating State energy conservation programs. 20 percent of the funding for all programs except the Low Income Weatherization Program should be allocated to those states which have

been evaluated as having done the best job. These evaluations should be conducted by independent contractors who are paid directly by DOE and should take place every two years.

The difficult task will be to design the criteria for judging what constitutes a good job. I would suggest the establishment of a committee consisting of State and Federal officials who would submit a plan to Congress within 180 days. Congress would have 45 days to disapprove or amend that plan. This process should be repeated every two years, since what constitutes appropriate criteria will change from year to year.

Fifth, as a prerequisite for receiving funds each state should be required to submit to the Department of Energy a plan which not only includes a description of how the state proposes to spend its share of Federal conservation monies but also the following: a description of the policies and programs will be put in place to ensure the demand and supply side options are evaluated on an equitable basis in the consideration of energy efficiency.

[The prepared statement of Mr. Lee follows:]

TESTIMONY BEFORE THE SENATE SUBCOMMITTEE

ON ENERGY REGULATION AND CONSERVATION

ON S. 247 THE STATE ENERGY

CONSERVATION PROGRAM'S IMPROVEMENT ACT OF 1989

BY

HENRY LEE
EXECUTIVE DIRECTOR

ENERGY AND ENVIRONMENTAL POLICY CENTER
HARVARD UNIVERSITY

MAY 2, 1989

My name is Henry Lee and I am the Executive Director of Harvard's Energy and Environmental Policy Center. Prior to coming to Harvard, I served four and a half years as the Director of Massachusetts' State Energy Office. In this capacity, I was responsible for the implementation of all energy conservation programs for that state.

In recent years, I have done substantial research on the effectiveness of state and local energy conservation programs and I am now serving as Chairman of the Advisory Committee to the New England Electric System for their Demand Management Programs. These experiences have provided me with an opportunity to look at energy conservation programs from many perspectives. Therefore, I welcome the opportunity to come here this afternoon to testify on behalf of Senate Bill 247, The State Energy Conservation Programs Improvement Act of 1989.

In recent years, state energy conservation programs have come on hard times. Even in those instances in which Congress has been able to restore funds for State programs, the threat of cutbacks in subsequent years has inhibited the ability of State energy officials to create any programmatic continuity. Very simply, you cannot develop an effective energy efficiency program if its life expectancy is totally uncertain. This statement is especially valid for energy efficiency programs in which continuity is essential in order to develop markets for those programs and the infrastructure to deliver them.

Cutbacks in federal funding were based on a premise that government intervention to promote energy efficiency was simply unnecessary. Markets left to their own devices would solve the nation's energy problems.

There are two fallacies with this view.

First, there is no free market for oil. For the last several months, OPEC has been able to maintain prices in the range of $18.00 per barrel despite the fact that there still is a 5,000,000 barrel capacity surplus in the world. As oil consumption increases worldwide and conventional production declines in the Western countries and, more particularly, the United States, this surplus will disappear and OPEC will become even stronger. Oil imports for the past 4 weeks comprised more than 55% of US oil consumption and could increase to 70% by the middle of the next decade. While there have been increases in non-OPEC supplies, it is clear that the residual barrel of oil in the 1990s will be coming out of the Persian Gulf--an area that remains unstable.

While I find these arguments compelling, I am not politically naive. This country has experienced six consecutive years of declining real energy prices. Gasoline prices dropped 63% in real terms between 1982 and 1988. The American public feels that prognosticators such as I are akin to "Chicken Little". The bottom line is that government can still pursue certain policies, such as the Strategic Petroleum Reserve, but given the present fiscal realities, I do not foresee large amounts of funding being directed towards energy programs, even though, over the long term, such investments would be more than justified.

This brings me to my second "source of market failure". It is becoming clear that energy and environmental policies are inextricably linked. While problems of acid rain and the failure to meet tropospheric ozone standards in approximately 92 cities have been targets of concern, it was the emergence of the possibility of global climate change that turned this concern into a mandate for governments to be much more sensitive to the environmental implications of their energy policies.

This argument <u>does</u> have public support.

Therefore, I find this legislation, S. 247, to be timely. I would, however, urge the Committee to consider expanding its scope. To some extent, this bill simply takes the old conservation programs based on the old rationales and makes them more efficient and equitable. While these goals are worthy of support, this Committee should consider going further and shaping conservation programs to meet emerging public concerns.

At this stage, one could legitimately pose three questions:

1) Is improved energy efficiency a reasonable policy option for improving environmental air quality?; 2) Why should state governments be given the responsibility for implementing efficiency programs?; and 3) What is the difference between the conservation programs that were effective in the 70s and those that will be effective in the 90s?

WHY AIR EFFICIENCY?

At first blush, this is a relatively simple question to answer. Efficiency options do not emit air pollutants, toxic materials, and water pollution. Further, they take up almost no land.

I am not advocating that we build no additional power plants, or tear down our factories or abandon the automobile as a means of transportation. All I am saying is that we cannot continue to "do business as usual." Anybody who has tried to site a power facility and run into the very legitimate array of new air, water and land regulations is aware of what direction the winds of public policy are blowing.

Let me give you a simple example. New England will need about 6,500 megawatts of additional power between now and the year 2000. Given that power plants are going to be built in smaller increments, this means that we must build 15-25 new moderately sized power facilities, each demanding 300,000-600,000 gallons of water

a day, and each spewing out hundreds of tons of pollution into the atmosphere. I would note that most areas of Southern New England are not in compliance with federal air standards--standards which some experts are beginning to question as being too lax. Now, if I ask this Committee, what is the possibility that 15-25 of these facilities are going to get sited over the next six years, what would be your answer? I suspect that you would be reasonably skeptical of this prospect. If this is the case, then the New England states have no choice but to either aggressively pursue energy conservation or reverse their environmental goals. I do not suspect they will do the latter.

I can give similar examples for transportation, industrial or commercial sources.

WHY STATE GOVERNMENTS?

What constitutes an effective energy program will differ from one region to another. The idea that there is a single efficiency program that is effective for the nation as a whole ignores reality.

Furthermore, the federal government cannot design 50 separate energy efficiency programs. The only way one can develop programs which are sensitive to the requirements of each state is to have the state develop those programs.

If the states should design them - why not let them pay for them? If the benefits could be contained within state borders, I would agree - let them pay. But benefits from these efficiency programs will, in large part, accrue to the nation as a whole. The benefits of increased energy security will not be limited to a small number of states. The benefits of reduced pollution will not remain localized. Acid rain and ozone have taught us that pollution does not recognize state boundaries.

EFFECTIVE PROGRAMS FOR THE 90s

Energy efficiency requires decisions by literally millions of individuals. Governments do not conserve, people do.

You must give people incentives and the tools to react to those incentives.

The nation went through a quadrupling of oil prices in 1973-74 and then a tripling in 1979-80. These increases were more than enough to induce homeowners and businesses alike to substantially reduce their use of energy.

The role of state energy efficiency programs was to provide information to those people who would not otherwise efficiently and quickly obtain that information. While most of the conservation that we saw in the late 70s and early 80s stemmed almost exclusively from responses to price increases, government efficiency programs insured that the consumer response to those prices occurred at a more rapid rate. I would argue that the benefit of accelerating the nation's response both measured in terms of economic stability and social well-being was not trivial.

The situation today is different. As I mentioned earlier, we have seen real energy prices decline year after year during the 1980s. To try and argue that people should conserve in response to price will be relatively ineffective. To argue that one must conserve in order to minimize the damage to our environment will, however, be compelling in the present political atmosphere.

In the remaining minutes, I would like to offer several suggestions for broadening the scope of this proposed legislation. I will limit my comments to programs and policies that relate to state governments, and I will try to be sensitive to the realities of the federal budget.

I would recommend the following:

1) The Committee should change the name of the bill to "The State Energy Efficiency Programs Improvement Act of 1989". The term, "conservation" is a stark reminder of cardigan sweaters, low thermostat settings and gasoline lines. It is a term that is not conducive to generating public support.

2) To the extent possible, all existing state programs, except the Low Income Weatherization Program, should be consolidated into a single program. This bill makes important strides in this direction.

3) The Energy Conservation Program for Schools, Hospitals, Local Governments, and Public Care Institutions should be phased out. The rationale for singling out these institutions for special attention is no longer relevant. Programs to assist schools and hospitals should be treated in the same way that we treat programs focusing on other institutions.

If a dollar invested in reducing energy use in a school building is the most cost-effective option, then states should spend that dollar accordingly, but if it is not, then it makes no sense to require states to make such investments, thereby foregoing more effective alternative uses of this money. The decision as to how to maximize both fair and efficient use of state conservation money should lie with state officials. In some states, I am sure that the optimal use of a portion of the money will be to reduce energy use in hospitals and schools. In other states, this will not be true.

The danger with my suggestion is that the money now going to this specific program will simply be diverted away to non-energy programs. Therefore, there must be an agreement between the Congress and the Executive Branch that the funds now

used for this program will be available to the states to be used for a broader spectrum of energy efficiency programs.

4) In keeping with the theme of my comments, I would suggest a trade-off. In return for more flexibility for the states, Congress should require the Department of Energy (DOE) to develop an effective process for evaluating state energy conservation programs. Twenty percent of the funding for all state conservation programs (except the Low Income Weatherization Program) would be allocated to those states which are evaluated as having done the "best job". These evaluations should be conducted by independent contractors who are paid directly by DOE and should take place every two years.

The difficult task will be to design the criteria for judging what constitutes a "good job". I would support the establishment of a committee consisting of state and federal officials who would submit a plan to Congress within 180 days. Congress would have 45 days to disapprove or amend that plan. This process should be repeated every two years, since what constitutes "appropriate" criteria will change from year to year.

It is imperative that the evaluation process be perceived by all the parties as fair, otherwise this process will not work. On the other hand, I feel confident that an effective process could galvanize the competitive instincts in each state to develop more effective energy efficiency programs.

5) As a prerequisite for receiving funds, each state should be required to submit to the Department of Energy a plan which not only includes a description of how the state proposes to spend its share of federal conservation monies, but also the following:

a) A description of the policies and programs which will be put in place to insure that demand and supply-side options are evaluated on an equitable basis in the consideration of future energy investments, licensed or regulated by the state.

b) A description of how energy efficiency and alternative fuel programs compliment and enhance efforts by state transportation and environmental officials to meet federal Clean Air requirements for mobile sources.

c) An evaluation of the effect of the state energy plan on air emissions conducted independently by the state's department of environmental affairs (or its equivalent).

Ten percent of the funding available to the states under the provisions of this legislation should be earmarked for the development of these state plans.

The purpose of this section is to create a process at the state level which integrates energy and environmental considerations--a planning process which will become essential if we are to meet the public's concerns about clean air, global warming and general environmental quality.

6) I have purposely separated the Low Income Weatherization Program from other state energy efficiency programs, because it has a dual purpose - first, to save energy and second, to improve the social welfare of the recipient.

This program has been plagued by an inability on the part of governments to be clear about the existence of this dual purpose. For example, if one wants to maximize energy savings, then one would want to insure that the conservation option on which the last dollar available was spent resulted in more energy savings than any

other option for spending that dollar. If, on the other hand, the goal of the program is to maximize the welfare for each individual served, then one would want to make sure that investments were equal for each recipient.

In other words, the design of the Low Income Weatherization Program will differ significantly, depending on whether you choose to maximize savings or maximize welfare. If one also considers that the present program is being implemented by literally hundreds of organizations across the country, one should not be surprised that there is substantial diversity. I would urge Congress to either attempt to reconcile this difference or to explicitly agree that the program will continue to have two purposes and allow the states to select how they wish to strike a balance between the two.

I also support the provisions in this legislation to waive the 40% requirement, which has resulted in a substantial amount of uneconomic investment. I would, however, suggest that a more optimal standard for determining whether to invest in individual measures would be the ratio of discounted benefits to costs over a broad spectrum of available investment opportunities. A simple rate of return criteria is only appropriate if there are no constraints on the total amount of funding available.

These six recommendations attempt to meet four goals.:

1) Provide strong incentives for the states to engage in a creative planning process, integrating energy and environmental priorities. In an era of low prices, I think this is the only way to provide new momentum for state energy efficiency programs.

2) By integrating environmental, energy and transportation concerns, it may be possible to leverage additional funding for programs which are multi-faceted, i.e. they serve both energy and environmental purposes.

3) Give the states the flexibility and the funds to do the most effective job possible. In return for this flexibility, the federal government has an obligation to evaluate these programs and to insure that this evaluation is both objective and fair.

4) Streamline the existing array of programs to maximize the ability of states to pursue cost-effective measures in an era of fiscal constraint and where feasible, provide incentives to insure these abilities are tapped to their fullest potential.

I appreciate the opportunity to voice my views on this subject and I will be glad to answer any questions.

Senator METZENBAUM. We will put the balance of your statement in the record.

What did you suggest the new name ought to be?

Mr. LEE. Substitute "Energy Efficiency" for "Conservation". Energy Efficiency Improvements.

Senator METZENBAUM. Ms. Duckett, you are the next witness according to our schedule, but Senator Bumpers would like to be here to hear your testimony, and I do not want to deny him that opportunity. He will be here by 2:50 p.m., if that would be all right with you.

Ms. Carol Tombari, Director of the Energy Management Center, Austin, Texas. We are happy to hear from you.

STATEMENT OF CAROL TOMBARI, DIRECTOR, GOVERNOR'S ENERGY MANAGEMENT CENTER, STATE OF TEXAS

Ms. TOMBARI. Thank you very much. I am happy to be here. I am the director of the governor's Energy Management Center for the State of Texas, and we administer the Federal and the State conservation programs for the State.

I am also on the board of directors of NASEO, which is the National Association of State Energy Officials, and in that capacity I have chaired a committee of NASEO, the Committee on State Energy Conservation Programs. We have been aware of the development of this legislation and have worked with some of your staff over the months, having been very privileged to do so.

I want to thank you very much for taking leadership on this important issue. We think it is vital, and we are interested in seeing these programs reinvigorated and ready to take us on into the 21st Century.

NASEO as an organization represents 50 states, territories and the District of Columbia, so you can imagine that we bring a lot of different perspectives to bear when we evaluate energy issues, not the least of which some of us are producing states and some of us are consuming states.

Among the large common ground that we have found is our belief that energy efficiency is a vitally important part of the overall energy mix that should take us into our energy future.

We in Texas, by the way, abandoned the word "conservation" about eight years ago. "Efficiency", for whatever reasons, just seemed to speak very well in our state. We use the terms "efficiency" and "management" interchangeably. We found that when President Reagan said that "conservation" had connotations of sweating in the summer and freezing in the dark in the winter, we tried to find a happier word. I am not sure how substantive that is, but we went for it.

We are very happy to support this bill, S. 247. We heartily endorse it. We think it takes a realistic and achievable step towards boosting the effectiveness of the energy efficiency programs that we all run.

You asked what we have learned in the course of administering these programs. One very important lesson that we have learned is that as important as it is to provide technical assistance and to educate people in energy efficiency, you have not completed the job

unless you have made the capital investments that actually secure those energy savings.

With all the technological developments over the past 10 years and the advancements that have been made in the analytical methodologies whereby we can quantify the energy savings, we now are at the point where we can say that energy conservation, energy efficiency and capital improvements can result in measurable, reliable and predictable energy savings.

That is, I think, the mission of these programs in the future, and that is why I especially like the innovative financing provisions of this legislation. It will enable the states to get those hardcore savings in place and working for us. We find that that is a key provision in this bill.

A related provision in the bill that we in Texa also like is the integrated energy planning provision, because on we have those measurable and reliable savings in place, then w can look at offsetting additional generating capacity. I think that that will help everybody in the future.

I am not saying there are no more power plants are going to be needed. That is not the case at all; but such additional generating capacity can be offset through these programs.

The State of Ohio I think is to be commended in particular for the innovative financing strides that that state has taken. They have leveraged additional private sector funds, and that is something that S. 247 would make available to all states to do. We think that would be beneficial.

Other provisions of the ill require energy emergency planning on the part of the states. States do not often like to be told by the Federal Government what to do, but there is a clear national interest at stake here. Really, this is a case where if we do not all hang together, we most assuredly will all hang separately.

I believe in the last decade there has been some ground lost among some of the states in their energy emergency planning efforts. We really do need to be prepared so that we have no weak links in the chain.

I will be very happy to answer any other questions that you may have.

[The prepared statement of Ms. Tombari follows:]

TESTIMONY

OF

CAROL TOMBARI

OF THE

NATIONAL ASSOCIATION OF STATE ENERGY OFFICIALS

BEFORE THE

SUBCOMMITTEE ON ENERGY REGULATION
AND CONSERVATION

COMMITTEE ON ENERGY AND NATURAL RESOURCES

UNITED STATES SENATE

MAY 2, 1989

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Chairman Metzenbaum, Subcommittee members, I am pleased to have the opportunity to appear before you today as you consider this important legislation. I am Carol Tombari, Director of the Governor's Energy Management Center in Texas. We administer federal and state energy conservation and renewable resource programs. I also am a member of the Board of Directors of the National Association of State Energy Officials (NASEO) and I chair the NASEO Committee on State Energy Conservation Programs. Today, I am testifying on behalf of NASEO in strong support of this legislation

Mr. Chairman, I would initially like to thank you for your aggressive support of these energy programs over the years. Your dedication has not gone unnoticed by the state energy officials. We like to think of ourselves as the foot soldiers in the trenches actually reducing energy waste and promoting a secure energy future. Senator, if we are the foot soldiers you are certainly one of the generals.

NASEO is comprised of state energy officials in 50 states, territories and the District of Columbia, and NASEO is affiliated with the National Governors' Association. State energy offices are independent agencies, or are located in Governor's offices, public service commissions, natural resource agencies and other bureaucratic configurations across the land. The varying

institutional arrangements -- plus our orientation as "producing" or "consuming" states -- bring differing perspectives to bear in our evaluation of energy issues.

It should be stressed, however, that there are far more issues on which we all agree than disagree. Obviously, energy policy is vital to the security of our nation and the quality of life of its citizens. Identifying our energy needs and mapping a realistic, economical strategy for meeting these needs are too important and complicated to ignore. Moreover, meeting these needs involves finding the ideal mix of resources, technologies and actions.

An important part of the mix is energy efficiency. It also is a valuable tool in alleviating a number of national ills, from over-dependence on foreign sources of oil to acid rain. A modest step in boosting the positive impact of energy efficiency would be to update and improve the four Federal energy conservation programs created in the 1970's and administered by the states since that time. These four programs are the State Energy Conservation Program (SECP), the Energy Extension Service (EES), the Institutional Conservation Program (ICP) and the Weatherization Assistance Program (Weatherization).

These programs have established a solid track record in the decade or more during which they have served the public. In 1987, the cumulative energy savings attributed to program intervention through the SECP

program was reported by DOE to be more than four quads -- or 744 million barrels of oil equivalent. At $20 per barrel, that represents almost $15 billion that was available for other investments (hopefully within the domestic economy) -- with no penalty in productivity or comfort. According to the U.S. DOE calculations, ICP produced cumulative savings of 317 trillion Btu's, resulting in a cost avoidance of almost $2 billion.

SECP, ICP, EES and Weatherization were enacted as the result of the nation's sudden realization -- prompted by the Arab oil embargo -- that its wasteful energy habits could have devastating economic and security consequences. It was imperative that citizens be educated to the need for energy efficiency, and the means of achieving it. These programs have met those needs and, beyond that, have resulted in significant, measurable energy savings. The fact is, had these programs not existed, we would be in far worse shape today.

Times have changed in the past fifteen years, and it is time for the programs to change with them. Technological advances permit impressive and reliable energy savings unheard of in 1976, and improved analytical methodologies permit us to evaluate and quantify those savings more accurately. Thirty-four-watt high-efficiency fluorescent tubes, motion detectors, packaged cogeneration units, high-efficiency absorption chillers, electronic energy management systems, high efficiency magnetic

ballasts, and thermal storage are among the host of conservation and load management devices that have significantly raised our expectations regarding what is realistically achievable in energy savings and cost avoidance. It should be noted that ICP, SECP and EES have provided a valuable proving ground for such devices.

S. 247, the "State Energy Conservation Programs Improvement Act of 1989," proposes changes in these programs to meet the challenge of a changing world and to bring the programs into the 21st Century as effective tools in helping meet the Nation's energy needs and alleviate its environmental problems. The mid-course corrections proposed in S. 247 reflect increased knowledge regarding the unmet energy needs of the country. These amendments would permit states to capitalize on the technological improvements of the past decade and to make modifications based on what we have learned.

Integrated Energy Planning

One key development over the past decade has been the ability to quantify and reliably predict energy savings attributable to energy improvement measures. Energy conserving measures thus supply energy, and load management devices supply plant capacity, making it possible to recognize the contribution of energy efficiency to reducing future power plant additions. For example, the City of Austin, Texas, has attributed 553 megawatts to these conservation and load management

resources during the next decade through these programs and is building what it calls a "conservation power plant".

The ability to supply energy and capacity through conservation and load management has staggering implications for the electric utility industry. The right mix of conservation, alternative resource and load management measures can offset the need for a substantial amount of additional generating capacity. In Texas, we estimate that the ten-year conservation potential in just the residential and commercial sectors is 7300 megawatts -- more than seven large power plants. An additional seven power plants may be found in the industrial sector when we finish modelling it.

An integrated energy planning process is needed to effectively blend the reliable and predictable demand-side options with the traditional supply-side alternatives, on a "level playing field." S. 247 would specifically promote integrated energy planning. This activity would be added to the list of optional programs allowable under SECP, so that all resources are examined by States. NASEO has formed a joint committee with the National Association of Regulatory Utility Commissioners (NARUC) to promote this activity. I might add that NARUC has written a letter in support of S. 247.

We believe that new power plants are needed, but that when we look at all resources we must also fairly

consider energy efficiency. We wish to stress, however, that we support a balanced energy policy that considers all resources. In fact, last year, NASEO prepared a national energy policy statement which I have provided to the Subcommittee. This policy is consistent with the policy adopted in early March by the National Governors' Association.

Innovative Financing

Another key lesson learned in the past decade is that reliable and predictable energy savings derive not only from brochures and workshops but from energy efficient capital improvements to structures and equipment. Education and technical assistance, as valuable as they are, do not produce the reliable and measurable savings that equipment and building shell upgrades do. Unfortunately, the lack of adequate capital has profoundly limited these needed investments. S. 247 would permit states to use funds expended under both ICP and SECP to promote alternative financing programs to leverage the funds needed for energy efficient investments.

Specifically, S. 247 would permit the states to capitalize on developments in the financing field. It would allow them to match the 50% Federal grant funds in ICP with loan programs, performance contracting or with other programs of innovative financing to provide the school or hospital's share. We have found that schools

and hospitals, especially in depressed areas, have difficulty meeting the 50% match requirement. This bill explicitly provides that other financing can satisfy this match in ways that may not require a front-end loaded capital contribution by the institution. Obviously, money saved on reduced energy costs can be used to provide more educational and medical services in these institutions, which is clearly an important national goal.

Under the SECP program states have instituted so-called demonstration projects involving capital investment in energy projects. The rules, and especially the application of these rules by DOE, have slowed these projects down and have added more paperwork than is necessary. Reflecting the needs identified by State energy offices, SECP has evolved from more of a planning and educational program into a program that mixes planning and education with capital investment in energy projects. States have worked to get a reasonable rule since 1983. In response to NASEO's 1986 petition, DOE issued a final rule in December, 1988, to loosen the rules slightly to allow more financing projects to go forward. The rule is a step in the right direction, but frankly it does not go far enough.

The states want a greater ability to obtain outside financing and to stimulate public-private partnerships, including leveraging of resources. Some of the innovative financing projects instituted by states,

despite the limitations of the current law, include the following:

(1) Ohio

In Ohio the state recently subsidized the interest rates on more than 2,000 loans for energy conservation improvements in Ohio homes. The $1.2 million interest subsidy leveraged $6 million in private sector funds. Also in Ohio, the State Energy Office provided $4 million to match $7 million from three major utilities to weatherize 12,000 housing units. This is an example of the type of public-private partnership that we want to encourage.

(2) Idaho

The State of Idaho's Energy Office has developed an Alternative Financing Demonstration Program which provides low-interest energy conservation loans to virtually every sector of the economy. In less than two years, 1,000 loans totalling $15,700,000 have been completed. Energy savings have totalled an estimated $1,707,815 per year.

(3) Colorado

Through SECP, the Colorado Office of Energy Conservation has launched a demonstration performance contracting project in the state capitol complex. State in-kind contributions have leveraged private sector investments of more than $175,000. The state will realize approximately $50,000 per year in energy

savings throughout the period of the performance contract and $50,000 per year during the remaining useful life of the retrofits.

(4) Utah

The Utah Energy Office currently utilizes SECP funds for a Demonstration Energy Financing Program for State Government Buildings. This program provides three-year loans to implement energy savings projects, such as automatic control systems, variable air volume retrofits, lighting modifications, storm windows and insulation. The Energy Office estimates the annual savings for this demonstration activity at $558,264.

(5) Oregon

In Oregon, SECP funds were used to establish the Business Energy Tax Credit Program (BETC). BETC has helped more than 1,600 businesses and generated more than $140 million in project investments. The annual energy savings for this program currently exceed $50 million.

Flavorland Foods, Inc. of Forest Grove, Oregon is just one example of a business that participated in the BETC program. Flavorland will receive a $52,000 state tax credit for new freezers used to process berries and corn. The new freezers will save an estimated $12,000 per year in energy costs. These savings, in addition to those from a previous BETC project at their new plant, have reduced

Flavorland's energy consumption to 45 percent of the consumption at the old facility.

Energy Savings Goal

S. 247 also sets an updated energy savings goal of ten percent of projected consumption by the year 2000. The energy office in Michigan estimates that, if met, this target could mean energy cost savings for the nation of $326 billion over 10 years, based upon DOE's current long-term energy use projections. Frankly, these energy programs are critical to reducing our consumption of foreign energy sources. In 1988, the net value of our energy imports was $32.9 billion, which was 28% of our trade deficit. Thus far in 1989, our crude oil and petroleum product imports have increased by 13.2% and 18.1%, respectively, through mid-April.

Energy Emergency Planning

Another provision of S. 247 adds energy emergency planning to the list of mandatory programs states must undertake with their SECP funds. Due to the ten-year respite from energy supply disruptions and dramatically reduced federal funds available for these programs, energy emergency planning has been relegated to "back burner" status in many states. These energy conservation programs were created, in part, to build a national infrastructure in the event of an energy emergency, yet SECP did not mandate energy emergency planning. It would be a cruel irony indeed if years of neglect by some rendered the

infrastructure impotent when needed by all. We have worked closely with Edward Badolato, Deputy Assistant Secretary for Energy Emergencies at DOE, since he joined the Department. We have made great progress in forging needed communications links with DOE in this area and we hope to continue that close cooperation.

We would also suggest a technical amendment to Section 3(a)(6) of S. 247 to ensure that dual approvals at the state level of energy emergency planning programs are not required before submission to DOE. We have worked with DOE energy emergency planning staff in developing the language which we will submit to the Subcommittee. We want to clarify the point, however, that no approvals of state energy emergency plans are sought or required by DOE. These plans will be submitted to DOE for informational and coordination purposes.

Energy Extension Service and Supplemental State Energy Conservation Program

The proposed merger of EES into SECP, recognizes that energy offices generally operate these programs together. In the interest of streamlining administrative tasks associated with program delivery, S. 247 would eliminate the EES as a separate program while retaining and incorporating key EES activities among the mandatory SECP elements. This provision would also eliminate the EES Advisory Board. Finally, S. 247 proposes the repeal of the so-called "Supplemental State Energy Conservation

Program" (42 U.S.C. § 6327), since all the key provisions are included in the merged SECP/EES program.

Alternative Transportation Fuels

The legislation would also explicitly promote the use of alternative transportation fuels. The states have been the leaders in this area, with California especially contributing significant resources to the development of cleaner transportation fuels, such as methanol, ethanol, compressed natural gas and electric vehicles. This is a key area in which the state energy programs are linked to mitigation of environmental problems. Southern California's recently announced air quality improvement program assumes a significant contribution from alternative motor fuels. The states have worked closely with General Motors, Ford and Detroit Diesel Corporation in promoting such alternatives. A number of other states from New York to Hawaii have begun activities in this area.

This is just one area where energy and environmental issues are linked. It should be noted that S. 247 is included as Title V of S. 324, the legislation dealing with global warming. Energy offices are involved in a variety of environmental programs. New York State has an extensive radon mitigation program operated by the energy office. Connecticut's energy office has set up regional recycling centers. State energy offices throughout the country are engaged in activities ranging

from waste reduction to resource recovery plants. Other examples include:

(1) Rhode Island

The Governor's Office of Energy Assistance and the Department of Environmental Management have designed a program for the state to provide a "start-up" incentive for communities to recover and utilize waste oil as energy while protecting the environment. Rhode Island projects that this program should recover an estimated 193 billion Btu's per year of energy statewide, which is the equivalent of more than 33,000 barrels of oil.

(2) North Dakota

The State of North Dakota has instituted an SECP demonstration project for wheat farmers -- a "Solid Fuel-Fired Grain Dryer". This device is not merely a dryer, but it is also a furnace which is compatible with most existing commercial crop dryers.

The furnace uses a heater which burns coal in conjunction with agricultural wastes such as straw, chaff, sunflower hulls, and corn cobs. Burning at 85% efficiency, the dryer produces low stack temperatures and eliminates many possible air contaminants. The fuel cost savings for this dryer approach 90%, which amounts to an estimated net cost savings of $.10 per bushel for wheat that yields 35 bushels per acre.

Conclusion

I would be remiss if I did not mention that we appreciate the cooperation we have received from both Alan Stayman and Leslie Black of the Subcommittee staff, and from David Nemtzow of your staff, in developing this legislation. We have worked with Al on this bill for over a year.

The energy challenges facing the nation are many and complex. Despite the impressive performance of these programs, there still is a large unmet need in our country. For example, DOE estimates that the ICP program has served 29% of the total eligible schools and hospitals. S. 247 proposes a number of measures that are achievable. They represent a logical step in tackling the larger energy issues that will confront us by the year 2000. We heartily endorse this bill.

Senator METZENBAUM. Thank you very much, Ms. Tombari.

Mr. William Concannon, Assistant Secretary in the Executive Office of Communities and Development in Boston, Massachusetts.

STATEMENT OF WILLIAM L. CONCANNON, ASSISTANT SECRETARY, MASSACHUSETTS EXECUTIVE OFFICE OF COMMUNITIES AND DEVELOPMENT

Mr. CONCANNON. Thank you, Senator Metzenbaum. Thank you for the opportunity to testify on behalf of S. 247.

Prior to becoming Assistant Secretary, I was the Director of the Massachusetts Office of Energy Conservation for five years. In that office rests the responsibility for the policy and management development of State, Federal and oil overcharge energy conservation programs.

I am here today, Senator, to tell you that the Weatherization Assistance Program is not a soft delivery program. It is a program that has a hard message and delivers cost effective results to poor families across this nation. We are a program with notable benefits. We save energy, and in saving energy we reduce fuel bills for poor persons. We stabilize and observe low income housing by adding benefits to that home which last for in excess of 20 years. We create a conservation industry and sustain it on a local level either through the purchase of inventory or through developing skills among persons who otherwise may not have them. We lower CO2 emissions into the environment by conserving energy.

We have changed this program in the course of the last decade, and we have changed it for the better. I would like to share with you a brief chronology of the Massachusetts history relative to change.

In 1981 we introduced a tenant-landlord agreement for the protection of tenants. They could not have their rent increased for one year based upon conservation improvements.

In 1981 we also purchased our first infrared scanners as a quality control measure in a home.

In 1983 we began paying for subgrantee staff persons to get their oil burner technician licenses so that they were informed and skilled in people's homes.

It was that year that we first did an energy saving study and followed it up for two successive years to evaluate ourselves relative to the improvements in the program.

In 1984, five years ago, we purchased our first blower door to ensure that what we were doing in a home was cost effective.

In 1985, we focused on training and began in concert with the oil and gas industry providing training for all of our people.

In 1985, we created a heating system program. We noted that the Department of Energy Weatherization Program did not have the resources for us to retrofit, repair or replace a low income person's heating system. We could not serve people well. Consequently, through a separate pot of money we created a program which will spend up to $2,200 in someone's home to replace their heating system. It is a tremendous program. It is noteworthy. It is valuable and necessary for low income persons and presently not possible through the DOE program.

In 1986 we began our linkages to other programs to ensure that our dollars were leveraged well. For instance, we ensure that if we are going to weatherize public housing that other funds are in there as well.

We have grown. We have changed. We have coordinated applications for fuel assistance and weatherization. Many opportunities await us. S. 247 addresses some of those.

We support the elimination of the 6040 provision but support it on the condition that there is a cost payback audit. If you want to protect dollars, we need the audit.

We support the elimination of the $1,600 cost per unit if there is the replacement of someone's heating system. We would add that the heating system should be replaced not only in terms of cost payback but alwo in terms of safety. It makes no sense to weatherize someone's home and leave an unsafe heating system.

We do not support the authorization level of $200 million but ask that you increase it to $350 billion. Our suvey shows that we have pent $500 million in one year based upon oil overcharge funds, weatherization and other support, and with the elimination of oil overcharge funds and the use of fuel assistance funds we request a $350 million authorization level.

Thank you very much.

[The prepared statement of Mr. Concannon follows:]

TESTIMONY

OF

WILLIAM L. CONCANNON

ASSISTANT SECRETARY

MASSACHUSETTS EXECUTIVE OFFICE OF COMMUNITIES AND DEVELOPMENT

ON BEHALF OF THE

NATIONAL ASSOCIATION FOR STATE COMMUNITY SERVICES PROGRAMS

ON

S.247

THE STATE ENERGY CONSERVATION PROGRAMS IMPROVEMENT ACT OF 1989

BEFORE THE

SUBCOMMITTEE ON ENERGY REGULATIONS AND CONSERVATION

OF THE

COMMITTEE ON ENERGY AND NATIONAL RESOURCES

MAY 2, 1989

I would like to thank Senator Metzenbaum and the other members of the Subcommittee on Energy Regulation and Conservation of the Committee on Energy and Natural Resources for the opportunity to testify on S.247, the State Energy Conservation Programs Improvement Act of 1989. My name is William L. Concannon, and I am an Assistant Secretary with the Massachusetts Executive Office of Communities and Development. For five years prior to assuming this current position, I was the Director of the Massachusetts Office of Energy Conservation in which rests the responsibility for all state, federal, and oil overcharge weatherization assistance programs. Today I shall present the official position of the National Association for State Community Services Programs (NASCSP), and shall limit observations and comments to those pieces of the proposed legislation which affect the Department of Energy Weatherization Assistance Program.

The weatherization assistance program has, throughout its history, provided low income people with a service which reduces fuel consumption, saves energy, and lowers fuel bills; preserves affordable housing; and provides comfort against the elements. It is also a program which has supported the economy by producing the growth of small business contractors.

The weatherization program is not a soft delivery program. Rather, it is one which brings to a low-income person's home a product for which there is a cost-effective result. The weatherization program has evolved from emergency one-time service and do-it-yourself workshops to a quality program which promotes long-term, maximum payback measures. States have developed strong tenant/landlord policies, promulgated well researched consumer education literature, established energy conservation material standards, and created cost efficient heating system assistance programs with other funds - soon to disappear entirely.

Approximately 2 million households have received weatherization assistance since the DOE program began in 1977. While this is certainly a significant number, 1980 census data indicates about 19 million households are eligible for our services.

The weatherization program has matured, achieved an outstanding record of accomplishment, and gained effectiveness as we have weatherized low-income homes over the last twelve years. Weatherization is a comprehensive program that provides economic benefits to low-income Americans while contributing to energy conservation, lessening environmental degradation caused by the buildup of CO2 (carbon dioxide) in the atmosphere, and stimulating the economy. Notable benefits of the program include:

- Results in substantial energy savings and therefore reduces monthly fuel bills for low-income families, particularly the elderly and the handicapped, who walk the line between paying for housing, food, and/or medical needs. Among other costs, and being homeless;

- Stabilizes and preserves low-income housing stock, a rapidly diminishing product, by insulating walls and attics, replacing windows, and completing furnace modifications - all measures which remain with a home well into the future;

- Continues to create a residential conservation industry in the labor force whose expertise and technical know-how is substantial; and

- o Lowers CO2 emissions due to reduced energy consumption, and therefore a) diminishes the need for foreign energy resources and b) helps to relieve global warming. (The energy savings estimated for the weatherization program of the last year alone corresponds to 1.5 billion pounds of CO2 not being emitted into the atmosphere each year.)

The Weatherization Assistance Program continues to grow and to change. It has responded to the challenge to offer low-income households state-of-the-art technology. Through considerable effort on the part of DOE, State personnel, and interested advocates, we have changed the program from installing a plastic cover on a window to installing vinyl replacement windows with low e glass; from using CETA and volunteer labor to employing trained technicians, often with licensed skills; from delivering the program as a single source of assistance to creating one application for energy assistance which ensures that a household is considered for every energy conservation program offered.

At present in every state in the union there are professionally managed weatherization offices which administer weatherization operations through an extensive network of over 1,500 subgrantee agencies. Working with in-house crews, private subcontractors, or some combination, weatherization services provided by a significant portion of those professional organizations presently include:

- o Careful energy audits that make use of field computers, blower doors, infrared scanners, and furnace testing equipment. The audit results in site specific analyses and detailed work orders;
- o Sophisticated air sealing and insulation applications tailored to the needs of each dwelling, taking into account cost-effectiveness of measures installed, as well as indoor air quality and related considerations;
- o The retrofit (or replacement, where appropriate) of inefficient heating systems to achieve greater efficiencies in producing and distributing heat;
- o New energy-efficient window and door systems, particularly in multi-family buildings and mobile homes whose doors and windows are typically dilapidated;
- o Detailed energy conservation consumer education related specifically to clients' dwellings; and
- o The coordination of various resources, over and above the weatherization funds, to increase the scope of work on client dwelling units, thus increasing the net effectiveness of the program.

The DOE Weatherization Assistance Program has matured in capability and design and is at a point where, now, in its young adulthood, it represents the best of government in kind and spirit. There are, however, more opportunities for growth, more areas in which the program can change to ensure comprehensive service to low-income families. S.247 addresses some of those areas.

The current law requires that 40% of the expenditures in a unit be for materials. At the time the weatherization program was conceived, this made

sense. It tried to guarantee that maximum service - measured by installed materials - occurred in every weatherized home. However, this requirement is now becoming obsolete as technical advances in the field of auditing indicate that it is sometimes more cost-effective to perform labor-intensive work. In other words, after performing a sophisticated audit in a home, we may learn that the most cost-effective blend of measures is one which installs labor-intensive measures which the 60/40 ratio would otherwise prohibit. For instance, furnace work and wall insulation are low-material/high labor items; often these measures cannot be added to a home because of the out-dated standard which S.247 proposes to eliminate. The National Association for State Community Services Program (NASCSP) advocates that the 40% requirement for materials be replaced by a proviso which ties expenditures to an energy audit to determine the most cost-effective measures to be installed.

S.247 also seeks to amend the dwelling unit limitation under specific circumstances. While NASCSP believes that the $1,600 average is, in many instances, still appropriate, the proposed revision would better allow states to perform heating system improvements. As it stands now, most states try to perform heating system work using non-DOE WAP funds, typically LIHEAP or oil overcharge resources. Access to LIHEAP funds for weatherization activities is now almost impossible in the face of continued reductions in the federal appropriation; Oil Overcharge funds have - for the most part - been committed or spent. The proposed change in S.247 is proactive in nature, and not a fiscal year too soon. It is essential that states have the ability to serve low-income households in a comprehensive manner. We believe that this must include the opportunity to perform heating system retrofits and replacements.

S.247 seeks to authorize $200 million for the weatherization program in FY 1990 and such sums as may be necessary for 1991 and 1992. NASCSP cannot support the authorization level as proposed. Instead, we propose that the authorization level for DOE WAP for the next three years be no less than $350 million. We did not reach this figure arbitrarily. As noted above, the weatherization program is facing a withdrawal of financial support from two of its most abundant sources. During the past few years, when the weatherization program had access to LIHEAP and oil overcharge funds, we estimate that we were, in fact, spending on the national level at roughly $500 million. We are soon to be dependent on DOE funds alone. A $200 million appropriation, though certainly appreciated, would force us to continue the weatherization of American at a snail's pace. A lowely funded program would allow us to continue our work, but at a level without great and immediate benefit.

NASCSP advocates four additional changes in program direction, presently not stated in S.247, as follows:

- Funds need to be made available within the weatherization program to replace a primary heating system where safety is a factor (as opposed to its replacement in instances of cost-benefit). Weatherizing a home which has an unsafe heating system can pose health problems and tragedy.

- We seek legislative language permitting states to weatherize multi-family buildings conditioned upon the owner's willingness to contribute funds toward the cost of that weatherization.

- o We would like to see the conservation of electricity as an important activity within DOE WAP. To that end, we propose that weatherization programs be allowed to install electricity-saving measures (ballasts, fluorescent bulbs) in a low-income home independently of the cost-effective audit.

- o The weatherization program needs an ongoing evaluation component to determine the effectiveness of measures that are performed. Funds need to be available to allow states to develop studies that will enable DOE and the Congress to make better determinations about the effectiveness of the program nationally.

The good sense and logic behind the weatherization program is even more sound today than it was when it was conceived over a decade ago. Those years in between have built a dynamic, committed network of people who believe deeply in the validity of the program's purpose and who feel a responsbility to deliver on the promise of that purpose. Indeed, the energy and commitment of the program's human resources may be its greatest asset. From it comes the innovation and dedication that has brought the Weatherization Assistance Program to the level of competence and professional integrity in evidence today.

Thank you for this opportunity to testify on behalf of S.247 and other issues important to the Department of Energy Weatherization Assistance Program. The National Association for State Community Services Programs looks forward to working with you to shape this legislation and to guarantee its passage.

Senator METZENBAUM. Thank you very much, Mr. Concannon.

Mr. Fred Tucker, Executive Director of the Dixie Community Action Agency of Hugo, Oklahoma.

STATEMENT OF FRED TUCKER, EXECUTIVE DIRECTOR, LITTLE DIXIE COMMUNITY ACTION ASSOCIATION

Mr. TUCKER. Thank you, Mr. Chairman. I am very pleased——

Senator METZENBAUM. Does Oklahoma consider itself Dixie?

Mr. TUCKER. Little Dixie. This came from the history of a former speaker that named that area of the country.

Senator METZENBAUM. Thank you.

Mr. TUCKER. Senator, I am very pleased to be able to represent the National Community Action Foundation and the 900 community action agencies who deliver most of the Weatherization Assistance Programs. We are grateful for your leadership on this new legislation and for your unwaivering support of our efforts over the past difficult years.

Our DOE program is typical of small programs in rural areas in the Sunbelt. What is not necessarily typical about our agency is the variety of other funding sources that we have coordinated with the DOE program, the help we have received from the State office on getting funding for several related programs.

We have $77,000 from DOE and $41,000 from Energy Assistance. Together they provide insulation, infiltration reduction, storm windows and minor repairs to 107 homes per year at an average cost of $1,100.

In addition, we can save a lot of money even at this level of investment. I am submitting for your records three records of household bills before and after weatherization.

We also administer a housing and energy rehabilitation program under the Farm Home Administration. This is very important to us because of our extremely substandard housing stock. We use oil overcharge funds administered through the DOE program to pay for that part of the rehab which involves energy efficiency. This program puts $1,600 of the energy funds together with $8,000 of farm home preservation grant funds and 30 homes per year. We leave these families with a safe and sturdy housing unit that continues to be habitable for many years.

Frankly, Mr. Chairman, it is a shame that we cannot combine rehab funds with all of the energy jobs we do. Energy is one of the significant housing costs in our area, and the deteriorated conditions of the homes and the inadequacy of the basic plumbing and wiring systems are also costly to these families.

Our housing stock is extremely poor. So are our clients. The average income of the household we weatherize is $5,563 for a family of three. These are typically people who work at jobs that are not secure and fulltime but, rather, hourly jobs and are occasional and seasonal. We have 426 such families on our waiting list, and they could expect to wait an average of 11 months.

As you can tell, Mr. Chairman, we have a lot of need in Oklahoma but not enough resources to meet that need. Under the formula, we got just under a $3 average per household compared to approximately $60 in some mountain states. We would like to be able

to use these monies to keep houses cooler in the summer, as their elderly are really threatened by the terrible heat.

In closing, Mr. Chairman, weatherization has become the key part of the arsenal we use in fighting poverty. We have expanded the core DOE system using other resources and ideas that we can make a real cut in energy bills that stays with the household long after the work crews have gone home. Our clients are more comfortable, healthier and have a little more money for basic necessities.

National studies show that poor have only 6 percent of their income left for all discretionary uses after paying for household, including energy and food. In our area, that translates to about $336.

Thank you for having me here today and, far more important, Mr. Chairman, thank you for maintaining this important energy initiative.

[The prepared statement of Mr. Tucker follows:]

May 2, 1989

TESTIMONY OF FRED TUCKER
Executive Director
Little Dixie Community Action Association
Hugo, Oklahoma
On Behalf of the National Community Action Foundation
Washington, DC

Mr. Chairman, the National Community Action Foundation represents the nation's 900 Community Action Agencies who deliver the Department of Energy's Weatherization Assistance Program, as well as conservation initiatives funded by Energy Assistance, oil overcharge funding and major utility conservation program. Our programs are alive and healthy thanks to the continuing support of your Subcommittee and its House and Appropriations Committee counterparts. Without the firm resistance you have provided all our low income programs in the face of serious threats of extermination from the Reagan Administration over 4 million low-income Americans would be colder, poorer, sicker and less well-housed than they are today. We and our clients are deeply grateful the legislation you have proposed will improve and modernize the program and enable it to function even more effectively in the coming decade.

I would like to make four brief points and then provide a great deal of supporting material for your record.

First, the scale of low-income weatherization programs is far far greater than the DOE's initiative, but the DOE program structure, agencies and procedures are the template by which most other initiatives are shaped. The total federal state and private utility - funded effort totals somewhat more or less than one half billion dollars, that's $500 million per year. The last comprehensive study was undertaken in 1986 by the National Association for State Community Services and showed over 400,000 units of low income housing a year being weatherized. Our agencies perform the majority of the work, and probably employ 20,000 or more carpenters and building workers both through private contractors and directly.

Second, unlike the Energy Assistance Program, the Weatherization Program has benefitted greatly by the availability of oil overcharge funds. The National Consumer Law Center report we are submitting for the Record estimates that, from FY 1986 to sometime in the early 90's, some 6 to 7 fiscal years, $635 million will be added by the States to the DOE program and additional amounts, in at least the tens of millions, will be channeled through Energy Assistance programs for conservation improvements.

However, these funds are running out. Doe reports that States had committed and been approved by DOE to spend $489 million of that amount by the end of FY 88. Fy 89 figures are not available to us.

Some states which made very large commitments to the poor from PVE funds will use up all available funding in FY 89. We will be providing detailed material for your record. In any case, there are not large sums left to use for any low-income programs. The NCLC reports states $130 million remains uncommitted.

Frankly, with over 15 million eligible housing units not yet weatherized and the long long waiting lists at most of our agencies, we and our clients face the future with great concern. Energy Assistance resources for conservation have also declined each of the past 3 fiscal years. The authorization levels in the bill will permit us to maintain our current efforts somewhat more adequately than would otherwise be the case.

Third, this program has matured dramatically since the early 1980's. Since 1983, when we became able to use trained workers instead of hard core unemployed trainees, and 1984 when your Committee's amendments made it possible to work on upgrading heating systems and installing modern technology, our sophistication has soared. While states like Ohio or Oklahoma still use a standardized list of conservation measures, we have more options to use on each house. Further, our crews and contractors are carefully trained and certified for the tasks they perform. Many other states have, in conjunction with their utilities and/or through separate research efforts, developed advanced energy audit techniques which can be easily used out on the building site. Our state is now looking for appropriate models as well, and the results of DOE-sponsored field tests of measures suitable for warm-climate problems are eagerly awaited.

In cold-weather states in particular, there has been much experimentation with heating system improvements by our agencies, generally employing licensed private subcontractors. In those regions the audits show the value of heating system work outweighs several other measures of the kind their programs used to use, like infiltration improvements and storm windows. We are looking forward to the forthcoming DOE summary of available studies on these new measures as requested by the Senate Appropriations Committee.

The net result is that high energy conservation consumption states can achieve well over 30% energy savings in the program and regions like my own can achieve around twenty percent. All of us can meet rigorous tests of prompt rates of return on investment or "payback." I am submitting for your Record sample before and after bills for some of our clients which show substantial savings.

In our State, we do not work on heating systems in spite of their inefficiency, because our State and local programs are so small compared to those in cold weather states. We invest an average of $1100 per home, not the $1600 allowed.

page three

We need to be sure we can complete some reasonable share of our year-long waiting list but, given the deplorable condition of our housing stock, that doesn't permit mechanical work.

Further, no measures related to cooling efficiency are allowable under DOE rules. The Oklahoma field tests of cooling measures funded by DOE should tell the Department some items that must be permitted to allow localized solutions to our summer energy problems and our staggering electric bills.

Your legislation brings the program rules in line with the evolutionary growth in the state and local programs. It removes the impediments federal law and regulations pose to the technological advances achieved locally. For example, the current law requirement that 40% of expenditures be for materials is replaced with a better guarantee of quality investments in the bill.

The original purpose of the existing requirement was to ensure that each home received some high quality energy investment. The formulation was conceived to be a way to protect against a worker spending long hours on repairs and low cost materials and then departing without assuring a permanent change in energy efficiency.

Since weatherization today depends on an audit-driven list of measures and in many states includes specialized work on heating systems by licensed (and well-paid) contractors as a top priority. The revised and more sophisticated audits protect against the possibility of inappropriate investments. The 60/40 requirement means weatherizers are sometimes choosing less efficient investments in more expensive items to meet their arbitrary 40% quota.

Similarly, the $1600 average limit, which was a compromise to allow reasonable expenditure levels while maintaining production, is too low to permit major heating system work or replacement where necessary. Most states doing this work supplement DOE/WAP with LIHEAP funding. However, this ad hoc solution may not be available much longer.

The legislation permits DOE to waive the requirement for a state for very limited purposes, including major heating and cooling system work or replacement, and second, to provide an inflation escalator for the $1600. We will propose a short list of other eligible heating system measures to you shortly. Again we do not support unlimited waivers. Strict criteria should be in place both to assure Congress that the expenditures are necessary and also for the purposes of maximizing production of units consistent with energy savings.

page four

We also hope you will consider amending S 247 to include provisions:

1. To permit use of best available cooling technology.

2. To ease administrative funding limitations or small agencies as pointed out by Oak Ridge National Laboratory in its program review.

3. To require funds to DOE to promote the sharing of new management and technical tools among the states.

4. To require more protection of tenants we have weatherized as proposed by the National Consumer Law Center.

In conclusion, Mr. Chairman, as you are well aware, the poor are still profoundly affected by the high cost of energy and the high costs of staying in their homes and apartments. They typically spend over 11% of their incomes on home energy costs - compared to between 3 and 4% for the average household. This is a terrible burden when added to the high cost of renting or maintaining a home and acquiring the basic necessitites of life. By cutting 20 or 30% off that energy bill, we give our low income client between $200 and $300 back in Oklahoma, which approximates an entire months income for some of them.

The nation has moved on to new concerns since the energy crisis of the early 80's was in the headlines. Drug wars, carbon dioxide and homeless families have the headlines. But for the poor, energy costs are a larger part of their budget problems and lightening the energy burden is an important part of the solution of our housing, environmental and quality of life problems.

Thank you for hearing our views.

HARDWARE
IICA WHIRLPOOL APPLIANCES
PLUMBING
LUMBER
BUILDING SUPPLIES
TEXACO SERVICE STATION
TIRES
IHC TRUCKS
PICKUPS
SCOUTS
L-P GAS
TANKS
FEED AND SEED
CAFE

M. C. EASTER COMPANY

SINCE 1930
PHONE 244-2724
Box 338
BOKCHITO, OKLA. 74726

M. C. EASTER
OWNER

April 27, 1989

The dates and totals below represent the nurchases of propane made by Raymond Renick of Boswell, Oklahoma, before and after his house was weatherized by the Little Dixie Community Action Agency of Hugo Oklahoma:

BEFORE		AFTER	
4-3-85	$43.76	5-28-86	$30.90
4-20-85	39.17	6-24-86	33.48
5-9-85	30.35	7-8-86	33.48
5-28-85	36.72	7-14-86	23.38
6-22-85	30.28	7-15-86	30.81
7-3-85	33.66	8-8-86	30.90
7-20-85	35.02	9-3-86	30.90
7-30-85	33.62	9-17-86	30.90
8-8-85	32.76	10-3-86	30.90
8-23-85	43.45	11-5-86	75.70
9-11-85	28.74	11-13-86	50.47
9-11-85	32.76	12-23-86	78.80
9-26-85	35.85	1-17-87	78.80
11-19-85	35.02	3-4-87	75.71
12-10-85	105.06	3-14-87	15.51
12-19-85	108.15	3-25-87	30.90
1-01-86	36.05		$681.54
1-21-86	72.10		
2-01-86	70.04		
	$802.56		

Savinns: $201.02

Lone Star Gas Company
113 E. Jackson St. • Hugo, Oklahoma 74743

W. D. CURTIS
Manager

James Burton
906 W. Oklahoma
142640108604

DATE	CONSUMPTION	NET BILLING	
7-21-86	1.1	8.89	
8-19-86	1.1	8.06	
9-18-86	1.5	8.78	
10-17-86	1.9	10.32	
11-17-86	2.6	13.97	
12-18-86	4.6	24.58	
1-21-87	6.2	30.99	
2-19-87	6.3	34.17	
3-20-87	5.1	26.88	
4-21-87	5.4	29.67	
5-20-87	1.7	11.78	
6-19-87	1.6	10.36	
7-21-87	1.3	8.67	Weatherization 7/27/87
8-19-87	1.0	7.33	
9-18-87	1.3	8.72	
10-19-87	1.7	9.15	
11-17-87	3.7	18.18	
12-18-87	8.2	40.85	
1-21-88	12.4	55.93	
2-19-88	10.1	50.45	
3-21-88	8.1	39.80	
4-20-88	4.3	23.06	
5-19-88	2.0	13.86	
6-20-88	1.9	12.48	
7-20-88	1.1	9.19	

Pre-weatherization -- 12 months
39.3 mcf total $218.23
plus 6 ricks of wood at $35 210.00
total $428.23

Post-weatherization -- 12 months
55.8 mcf total $289.00
No Wood

PUBLIC SERVICE COMPANY OF OKLAHOMA
A CENTRAL AND SOUTH WEST COMPANY

April 27, 1989

The information below represents the electricity used by Ila Mae Jones of Boswell, Oklahoma, twelve months before and twelve months after her house was weatherized by the Little Dixie Community Action Agency of Hugo, Oklahoma:

Service Dates Before:	KWTS	Amount	Service Dates AFTER	KWTS	Amount
11-20-86	1,232	$63.65	12-22-87	1,765	$79.62
12-23-86	2,058	94.99	1-26-88	2,200	94.69
1-26-87	2,450	106.18	2-24-88	1,165	61.02
2-24-87	1,704	78.63	3-24-88	1,330	65.27
3-25-87	1,312	65.24	4-21-88	1,109	59.85
4-23-87	1,432	69.49	5-23-88	1,236	63.44
5-21-87	1,333	66.60	6-22-88	1,438	109.13
6-23-87	1,835	144.48	7-25-88	1,991	150.12
7-24-87	2,338	181.41	8-23-88	1,775	133.76
8-24-87	2,716	210.70	9-22-88	1,532	113.88
9-23-87	1,519	114.41	10-21-88	1,079	52.59
10-22-87	955	52.47	11-21-88	1,189	55.28
11-19-87	1,027	53.72			$1,038.65
		$1,301.97			

Re: _____ Applicant: _____

Household Assessment

			POINTS
1	Age 62 or Over	(10 pts)	_____
2	Handicapped*	(10)	_____
3	Income 0 - 49%	(12)	_____
	50 - 74%	(8)	_____
	75 - 99%	(5)	_____
	100 - 125%	(3)	_____
4	Fuel Type Electricity	(4)	_____
	Propane	(3)	_____
	Wood	(2)	_____
	Natural Gas	(1)	_____
5	Date of Application: More than 3 Years Old	(4)	_____
	2 to 3 years Old	(3)	_____
	1 to 2 Years Old	(2)	_____
	Less than 1 Year Old	(1)	_____
		A. Sub-Total	_____

Dwelling Needs

1	Ceiling	Insulation	(5)	_____
2	Walls	Replace sheet rock	(1)	_____
		Replace, tighten caulk	(1)	_____
3	Floors	Repair flooring	(1)	_____
4	Doors	Weatherstripping/caulk	(2)	_____
		Install threshold/doorsweep	(1)	_____
		Jamb/sash/sill replace or repair	(1)	_____
		Repair/replace exterior door	(1)	_____
5	Windows	Weatherstrip/caulk	(2)	_____
		Window repair/replacement	(2)	_____
		Storm Windows	(3)	_____
6	Roof	Roof Repairs	(2)	_____
7	Underpinning	Install underpinning/skirting	(3)	_____
			B. Sub-Total	_____

PAC Discretion

If the applicant has special problems which warrant extra consideration the PAC may award up to four (4) additional points. Such problems might include: emergency situations, small children under age six, unusual medical expenses, etc. (4) _____

If discretionary points are awarded, please state reason:

_____

_____

Total Points From A, B and C _____

PAC Review Signature _____ Date _____

*"Handicapped person" means any individual (1) who is a handicapped individual as defined in Section 7(6) of the Rehabilitation Act of 1973, (2) who is under a disability as defined in Section 1614(1)(3)(A) or 223(d)(1) of the Social Security Act or in Section 102(7) of the Developmental Disabilities Services and Facilities Construction Act, or (3) who is receiving benefits under Chapter 11 or 15 of Title 38, United States Code.

3:3 ksp 12/87

February, 1989

INTRODUCTION[1]

This report was prepared by the National Consumer Law Center under a grant from the U.S. Department of Energy and is the second of four quarterly reports to be provided under this grant.[2]

This report incorporates information collected by NCLC in telephone surveys conducted from late-January through February, 1989. As with the previous report, the information we collected on the status and state uses of both Exxon and Stripper Well funds is contained in a series of tables and in the narrative summary section of the report.

Under the terms of the DOE grant, each of the quarterly reports tracks final state decisions **allocating** use of these funds. The terms **"allocated"** and **"designated"** are used interchangeably throughout the document to mean that final state decisions have been made regarding these funds. Tracking state allocations about these funds is the only practical way for us to provide an overview of the actual status of state processes or decisions which have occurred with regard to this money.

Focusing only on state expenditures, or even obligations, of these funds does not provide a true picture of state activity in this area. The same is true with regard to submissions to or authorizations by the U.S. Department of Energy (DOE). Most states have adopted multi-year allocation plans; however, since DOE is only required to approve expenditures on a year to year basis (and states need only submit planned expenditures 30 days before they are made), the data that DOE officially receives from a state may only reflect partial allocation plans. Where available, however, the status of DOE review of a state's allocation is noted in the narrative summary section.

By focusing on final state decisions, or allocations, NCLC's reports give recognition to the subsequent activity which occurs following a final state allocation of these oil overcharge funds. In most states, for example, after a Governor and/or state legislature adopt a multi-year plan which designates specific amount of funds to certain programs, it is then up to the responsible state agencies to choose (through the Request For Proposal process, or otherwise) and fund individual projects within those programs. The likelihood that most states will be willing to revisit their decision-making with regard to these funds is not high, given the practical considerations that are a part of that process. For all intents and purposes, then, this allocated money is "committed," even if it may not be obligated under a contract.

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1. This report was prepared by Helen Gonzales, Staff Attorney, with the assistance of Ralph DiPietro, who served as law clerk in the Center's Washington, D.C. Office during the survey period.

2. Grant No. DE-FG02-88CH10381 was awarded to NCLC on August 15, 1988, at the request of the Congress, in PL 100-202 (12/87).

II. STATE USES OF OIL OVERCHARGE FUNDS: STATUS REPORT

As indicated at the outset, this is the second of four quarterly reports to be prepared for DOE on the status of state uses of the Exxon and Stripper Well oil overcharge funds. The current report reflects state information gathered by telephone from late-January through February, 1989.

Summary Findings

Between the time of our last report and the beginning of the surveying for this report (in late-January), the states received another $12.9 million of Stripper Well funds. While only a small amount of money, this distribution by the Department of Energy slightly changed the amount, and percentage, allocations of these funds.

Our survey revealed that **of the total $3.05 billion of Exxon and Stripper Well funds that the states had received from 1986 through January, 1989 (when our survey began), 95.4%, or $2.91 billion, had been allocated.** This figure represents an additional allocation of only 2.2%, or another of $80,000, from the amount allocated during the survey period of our first report (i.e., last fall). Further, we found that 22 states had already allocated 80% - 100% of these combined Exxon and Stripper Well funds (down by 8 states since our last report, due to the additional allocation of Stripper Well funds and to revisions made to the allocation amounts, by the states). Specifically, 12 states had made final decisions, or allocations, regarding all of both their Exxon and their 1986 through January, 1989, Stripper Well funds. An additional 15 states had 10% or less of their total funds left unallocated, while another 7 states had only 11-20% of their total money for which final decisions had not yet been made.

Allocation of Exxon Funds. In 1986, the states and U.S. Territories received $2.1 billion from the oil overcharge judgment against the Exxon Corporation; the state's share of this amount was $2.057 billion. According to our recent survey, 99% (or $2.044 billion) of the states' share of this money had been allocated.

Furthermore, thirty-nine (39) states had allocated all, or virtually all (95%-99%), of their Exxon money, while another 5 states had only 16-20% of these funds still unallocated. As we pointed out in our first report, this figure is significant because since the use of these funds is limited to only five programs, with the two larger programs serving low-income consumers, states have been more willing to use this money, rather than Stripper Well money, for low-income purposes; in fact, **one-half of the allocated Exxon funds (or $1.012 billion) had been designated for LIHEAP or WAP. The division of funds between LIHEAP and WAP was $483.65 million (or 24%) for LIHEAP and $529.02 million (or 26%) for WAP.** (The percentage share for the two programs has basically remained the same, since the first report.) It should be noted that a large amount of the funds designated for LIHEAP were intended to be used for weatherization.

All but one state had allocated roughly 50% (48% or more) of these Exxon funds. We found that 12 states had not used any funds for LIHEAP; 8 of these states had already allocated 100% of their Exxon money. Five states had not designated any money for WAP; 3 of these states had allocated 100% of their funds. One state had not allocated any funds for either LIHEAP or WAP (it had allocated 24% of its Exxon funds), while another state (which had allocated 59% of its funds) had allocated less than 1% to these programs. Eight (8) states had allocated 25% or less of their funds for LIHEAP or WAP. Some states had also designated some of their SECP or EES money for low-income outreach and other uses aimed at low income households, for a total of at least $13.52 million (see Table 3 for list of which states have made these identifiable low-income uses).

Use of Stripper Well Funds. From 1986 through January, 1989, the states received a total of $990.36 million under the terms of the Stripper Well agreement. Our survey revealed that 88% (or $868.03 million) had been allocated. **All but one state had made some Stripper Well allocations and only six states had not allocated roughly 50% of these funds.** We found that 22 states had allocated all or virtually all (95-99%) of their funds. Specifically, thirteen (13) states had allocated all of their funds, while another 11 states had allocated 95% or more of this money. Another nine (9) states had only 6% to 10% of these funds unallocated, while a further eight (8) states had only 11-20% of funds still left to designate.

We found that states had used **about 28%** of the $868.03 million in Stripper Well money they had allocated for exclusively low-income programs; these programs include LIHEAP and WAP, as well as other low-income projects. Of the $243.42 million allocated for low-income programs, **LIHEAP had received $106.73 million (or 12%) while WAP had received $57.36 million (or 7%). The other $79.33 million (or 9%)** designated for low-income uses were being spent through programs other than LIHEAP or WAP. Excluding the one state which has not yet made any allocations, 27 states had not allocatetd any funds for LIHEAP and 33 had not allocated any funds for WAP. Four (4) states had not allocated any funds for LIHEAP, WAP, or any other low-income uses, although one of these states (NC) had allocated 100% of the funds they had so far allocated for primarily, but not exclusively, low-income uses (so its allocation is shown in the "Other" category).

EXXON: SUMMARY ALLOCATIONS TABLE 1 FEBRUARY, 1989
[NUMBERS IN MILLIONS]

STATE	TOTAL RECEIVED	AMOUNT ALLOCATED	LIHEAP	WAP	SECP	EES	SECP/EES	ICP	OTHER USES
AL	$32.19	$32.38	$5.50	$5.00	$5.25	$3.25		$12.00	$1.38
AK	$8.27	$8.70		$6.29			$1.49	$0.90	
AZ	$21.56	$14.08	$1.50	$4.00	$6.15	$0.25		$1.50	$0.68
AR	$25.95	$29.31	$4.80	$2.50	$2.01			$20.00	
CA	$194.72	$214.78	$66.36		$61.33		$79.80	$5.29	$2.00
CO	$22.71	$25.33		$4.71			$20.61		
CT	$34.90	$37.00	$29.60		$1.75		$4.52	$1.20	
DE	$9.94	$8.68	$0.19	$3.00	$0.10	$0.04		$5.35	
DC	$4.67	$4.67	$2.07	$0.90	$1.00	$0.30		$0.40	
FL	$98.11	$57.93		$0.20	$16.10	$1.90		$39.70	
GA	$46.62	$55.60	$21.00	$14.70	$1.50	$2.40		$16.00	
HI	$14.48	$14.50		$4.00	$4.62	$1.63		$4.25	
ID	$8.69	$8.95		$3.28	$3.87			$1.80	
IL	$96.10	$115.00	$40.00	$62.55	$12.45				
IN	$51.63	$54.08	$20.90	$13.70	$8.81	$10.27		$0.40	
IA	$27.42	$24.13		$6.17	$12.61	$5.35			
KS	$23.96	$19.13	$10.84	$1.00	$2.49	$0.09		$4.72	
KY	$27.44	$13.11	$4.62	$8.49					
LA	$51.54	$51.54		$11.54			$10.00	$30.00	
ME	$15.09	$16.50	$0.20	$7.60	$6.70	$1.00		$1.00	
MD	$36.41	$40.35	$4.30	$30.00	$2.11	$0.94		$3.00	
MA	$70.34	$72.50	$9.85	$42.15	$20.50				
MI	$70.99	$79.30	$47.80	$13.00			$18.67		
MN	$36.07	$36.45	$5.50	$5.50	$14.30		$11.15		
MS	$28.38	$29.95	$2.37	$7.61	$5.10	$0.25	$2.12	$12.50	
MO	$41.52	$41.49	$3.86	$15.25	$11.29	$0.50		$10.59	
MT	$9.58	$10.55		$4.87	$2.90	$0.23		$0.90	$1.65
NE	$15.50	$3.67			$2.49	$1.18			
NV	$8.77	$7.53	$3.27	$2.51	$0.51	$1.02		$0.22	
NH	$9.80	$11.43	$0.75	$1.17	$5.16	$3.85		$0.50	
NJ	$75.43	$67.50	$43.50		$4.00			$20.00	
NM	$13.69	$15.92	$3.09	$3.61	$3.97	$1.03		$3.74	
NY	$159.87	$173.50	$17.00	$39.40	$72.00	$14.00		$31.10	
NC	$47.03	$27.54	$6.64	$7.40			$8.50	$5.00	
ND	$7.72	$8.30	$2.80	$1.30	$0.40	$0.10	$0.90	$2.70	
OH	$79.74	$78.00	$12.00	$50.30			$12.40	$3.30	
OK	$26.23	$30.10	$6.54	$5.31			$12.98	$4.00	
OR	$20.72	$22.31	$3.18	$10.71	$5.34	$0.03			$3.05
PA	$96.80	$106.00	$66.10	$31.30			$8.60		
RI	$8.00	$8.05	$0.55	$1.34	$3.31	$1.34		$1.50	
SC	$25.19	$29.30	$7.50	$8.60	$4.50	$4.40		$4.30	
SD	$7.50	$8.77	$1.56		$5.74	$0.41		$1.00	$0.06
TN	$34.60	$35.50	$3.50	$18.00	$4.00			$10.00	
TX	$157.19	$153.40	$2.00	$7.00	$130.10	$9.00		$8.00	
UT	$12.45	$13.20		$5.50	$5.50	$0.45		$1.75	
VT	$5.00	$5.66	$0.36	$3.00			$2.30		
VA	$53.38	$39.10	$14.10	$15.20	$6.40	$0.42		$3.00	
WA	$32.12	$41.59	$1.00	$15.13	$16.38	$0.77		$6.44	$1.87
WV	$12.90	$15.45	$7.15	$4.53	$3.03	$0.27		$0.47	
WI	$36.97	$17.70		$17.70					
WY	$8.87	$9.00		$2.00	$5.00			$2.00	
TOTALS:	$2,064.75	$2,044.51	$483.65	$529.02	$480.77	$66.67	$194.04	$280.52	$10.69

TABLE 2

EXXON FUNDS: LOW-INCOME USES
(NUMBERS IN MILLIONS)

FEBRUARY, 1989

STATE	TOTAL RECD.	AMOUNT ALLOC.	PCT OF RECD. $ ALLOC.	LIHEAP	LIHEAP PCT.	DOE WAP	WAP PCT.	LIHEAP & WAP AMT.	LIHEAP & WAP PCT.
AL	$32.19	$32.38	101%	$5.50	17%	$5.00	15%	$10.50	32%
AK	$8.27	$8.70	105%		0%	$6.29	72%	$6.29	72%
AZ	$21.56	$14.08	65%	$1.50	11%	$4.00	28%	$5.50	39%
AR	$25.95	$29.31	113%	$4.80	16%	$2.50	9%	$7.30	25%
CA	$194.72	$214.78	110%	$66.36	31%		0%	$66.36	31%
CO	$22.71	$25.33	112%		0%	$4.71	19%	$4.71	19%
CT	$34.90	$37.00	106%	$29.60	80%		0%	$29.60	80%
DE	$9.94	$8.68	87%	$0.19	2%	$3.00	35%	$3.19	37%
DC	$4.60	$4.67	102%	$2.07	44%	$0.90	19%	$2.97	64%
FL	$98.11	$57.93	59%		0%	$0.20	0%	$0.20	0%
GA	$46.62	$55.60	119%	$21.00	38%	$14.70	26%	$35.70	64%
HI	$14.48	$14.50	100%		0%	$4.00	28%	$4.00	28%
ID	$8.69	$8.95	103%		0%	$3.28	37%	$3.28	37%
IL	$96.10	$115.00	120%	$40.00	35%	$62.55	54%	$102.55	89%
IN	$51.63	$54.08	105%	$20.90	39%	$13.70	25%	$34.60	64%
IA	$27.42	$24.13	88%		0%	$6.17	26%	$6.17	26%
KS	$23.96	$19.13	80%	$10.84	57%	$1.00	5%	$11.84	62%
KY	$27.44	$13.11	48%	$4.62	35%	$8.49	65%	$13.11	100%
LA	$51.54	$51.54	100%		0%	$11.54	22%	$11.54	22%
ME	$15.09	$16.50	109%	$0.20	1%	$7.60	46%	$7.80	47%
MD	$36.41	$40.35	111%	$4.30	11%	$30.00	74%	$34.30	85%
MA	$70.34	$72.50	103%	$9.85	14%	$42.15	58%	$52.00	72%
MI	$70.99	$79.30	112%	$47.60	60%	$13.00	16%	$60.60	76%
MN	$36.07	$36.45	101%	$5.50	15%	$5.50	15%	$11.00	30%
MS	$28.38	$29.95	106%	$2.37	8%	$7.61	25%	$9.98	33%
MO	$41.52	$41.49	100%	$3.86	9%	$15.25	37%	$19.11	46%
MT	$9.58	$10.55	110%		0%	$4.87	46%	$4.87	46%
NE	$15.50	$3.67	24%		0%		0%	$0.00	0%
NV	$8.77	$7.53	86%	$3.27	43%	$2.51	33%	$5.78	77%
NH	$9.80	$11.43	117%	$0.75	7%	$1.17	10%	$1.92	17%
NJ	$75.43	$67.50	89%	$43.50	64%		0%	$43.50	64%
NM	$13.69	$15.92	116%	$3.09	19%	$3.61	23%	$6.70	42%
NY	$159.87	$173.50	109%	$17.00	10%	$39.40	23%	$56.40	33%
NC	$47.03	$27.54	59%	$6.64	24%	$7.40	27%	$14.04	51%
ND	$7.72	$8.30	108%	$2.80	34%	$1.30	16%	$4.10	49%
OH	$79.74	$78.00	98%	$12.00	15%	$50.30	64%	$62.30	80%
OK	$26.23	$30.10	115%	$6.54	22%	$5.31	18%	$11.85	39%
OR	$20.72	$22.31	108%	$3.18	14%	$10.71	48%	$13.89	62%
PA	$96.80	$106.00	110%	$66.10	62%	$31.30	30%	$97.40	92%
RI	$8.00	$8.05	101%	$0.55	7%	$1.34	17%	$1.89	23%
SC	$25.19	$29.30	116%	$7.50	26%	$8.60	29%	$16.10	55%
SD	$7.50	$8.77	117%	$1.56	18%		0%	$1.56	18%
TN	$34.60	$35.50	103%	$3.50	10%	$18.00	51%	$21.50	61%
TX	$157.19	$153.40	98%	$2.00	1%	$7.00	5%	$9.00	6%
UT	$12.45	$13.20	106%		0%	$5.50	42%	$5.50	42%
VT	$5.00	$5.66	113%	$0.36	6%	$3.00	53%	$3.36	59%
VA	$53.38	$39.10	73%	$14.10	36%	$15.20	39%	$29.30	75%
WA	$32.12	$41.59	129%	$1.00	2%	$15.13	36%	$16.13	39%
WV	$12.90	$15.45	120%	$7.15	46%	$4.53	29%	$11.68	76%
WI	$36.97	$17.70	48%		0%	$17.70	100%	$17.70	100%
WY	$8.87	$9.00	101%		0%	$2.00	22%	$2.00	22%
TOTALS	$2,064.68	$2,044.51	99%	$483.65	24%	$529.02	26%	$1,012.67	50%

EXXON FUNDS: OTHER USES [NUMBERS IN MILLIONS]

TABLE 3

FEBRUARY, 1989

STATE	TOTAL RECEIVED	AMOUNT ALLOCATED	SECP	RES	SECP/RES	ICP	OTHER USES	NOTES
AL	$32.19	$32.38	$5.25	$3.25		$12.00	$1.38	
AK	$8.27	$8.70			$1.49	$0.90		Some SECP funds for primarily low-income use
AZ	$21.56	$14.08	$6.15	$0.25		$1.50	$0.68	$680,000 to Navajo Nation, for weatherization
AR	$25.95	$29.31	$2.01			$20.00		
CA	$194.72	$214.78	$61.33		$79.80	$5.29	$2.00	Other $ for housing rehab. for farmwrkrs,elderly,handicapped
CO	$22.71	$25.33			$20.61			
CT	$34.90	$37.00	$1.75		$4.52	$1.20		
DE	$9.94	$8.68	$0.10	$0.04		$5.35		
DC	$4.60	$4.67	$1.00	$0.30		$0.40		
FL	$98.11	$57.93	$16.10	$1.90		$39.70		
GA	$46.62	$55.60	$1.50	$2.40		$16.00		About $1.2 million of RES funds for low-income projects
HI	$14.48	$14.50	$4.62	$1.63		$4.25		
ID	$8.69	$8.95	$3.87			$1.80		
IL	$96.10	$115.00	$12.45					SECP includes $1.25 million for low-income uses
IN	$51.63	$54.08	$8.81	$10.27		$0.40		
IA	$27.42	$24.13	$12.61	$5.35				
KS	$23.96	$19.13	$2.69	$0.09		$4.72		SECP includes $315,000 for low-income uses
KY	$27.44	$13.11						
LA	$51.56	$51.56			$10.00	$30.00		
ME	$15.09	$16.50	$6.70	$1.00		$1.00		
MD	$36.41	$40.35	$2.11	$0.94		$3.00		
MA	$70.34	$72.50	$20.50					
MI	$70.99	$79.30			$18.67			$900,000 of SECP/RES $ for low-to-moderate income use
MN	$36.07	$36.45	$14.30		$11.15			$7.5 million of SECP $ for low-to-moderate income uses
MS	$28.38	$29.95	$5.10	$0.25	$2.12	$12.50		
MO	$41.52	$41.49	$11.29	$0.50		$10.59		$50,000 of SECP/RES $ for homeless energy conservation
MT	$9.58	$10.55	$2.90	$0.23		$0.90	$1.65	Reserved for LIHEAP and/or WAP
NE	$15.50	$3.67	$2.49	$1.18				
NV	$8.77	$7.53	$0.51	$1.02		$0.22		
NH	$9.80	$11.43	$5.16	$3.85		$0.50		$450,000 RES $ for energy improvements in public housing
NJ	$75.43	$67.50	$4.00			$20.00		
NM	$13.69	$15.92	$3.97	$1.03		$3.74		
NY	$159.87	$173.50	$72.00	$14.00		$31.10		$12 million of RES $ for low-to-moderate inc. uses
NC	$47.03	$27.54			$8.50	$5.00		
ND	$7.72	$8.30	$0.40	$0.10	$0.90	$2.70		
OH	$79.74	$78.00			$12.40	$3.30		SECP/RES: $3.7 million for low & moderate inc. uses
OK	$26.23	$30.10			$12.98	$4.00		
OR	$20.72	$22.31	$5.34	$0.03			$3.05	$3.05m for cutbacks in LIHEAP/WAP;$820,000 SECP for low-inc.
PA	$96.80	$106.00			$8.60			
RI	$8.00	$8.05	$3.31	$1.34		$1.50		
SC	$25.19	$29.30	$4.50	$4.40		$4.30		
SD	$7.50	$8.77	$5.74	$0.41		$1.00	$0.06	$.06 for tribal government LIHEAP
TN	$34.60	$35.50	$4.00			$10.00		
TX	$157.19	$153.40	$130.10	$9.00		$8.00		
UT	$12.45	$13.20	$5.50	$0.45		$1.75		
VT	$5.00	$5.66			$2.30			$200,000 of SECP/RES funds for low-income use
VA	$53.38	$39.10	$6.40	$0.42		$3.00		
WA	$32.12	$41.59	$16.38	$0.77		$6.44	$1.87	$1.8mil/$1.87m=low-inc;$2.88m of SECP $ =low-mod.inc.uses
WV	$12.90	$15.45	$3.03	$0.27		$0.47		
WI	$36.97	$17.70						
WY	$8.87	$9.00	$5.00			$2.00		
TOTALS:	$2,064.68	$2,044.51	$480.77	$66.67	$194.04	$280.52	$10.69	

STRIPPER WELL: SUMMARY ALLOCATIONS TABLE 4 FEBRUARY, 1989
[NUMBERS IN MILLIONS]

STATE	AMOUNT RECEIVED 3/86-1/89	AMOUNT ALLOCATED	LIHEAP	DOE WAP	OTHER LOW-INC	OTHER PROGRAMS
AL	$15.44	$15.29	$2.27			$13.02
AK	$3.89	$0.00				
AZ	$10.32	$9.93			$3.80	$6.13
AR	$12.81	$12.53	$2.08	$2.92		$7.53
CA	$92.13	$90.94	$15.50			$116.00
CO	$10.82	$10.72		$2.01	$1.68	$7.03
CT	$17.09	$18.35			$4.92	$13.42
DE	$4.78	$4.15		$1.00		$3.15
DC	$2.40	$2.20	$0.06		$0.68	$1.46
FL	$46.50	$33.85		$13.25		$20.60
GA	$22.41	$22.45	$4.25		$3.75	$14.45
HI	$6.91	$1.00				$1.00
ID	$4.13	$3.82			$0.16	$3.66
IL	$46.22	$46.05	$11.50			$34.55
IN	$24.79	$22.64	$2.28		$3.16	$17.20
IA	$13.11	$11.03			$0.35	$10.68
KS	$11.28	$2.87			$0.11	$2.76
KY	$12.90	$4.76	$3.18		$0.58	$1.00
LA	$23.94	$25.09			$5.02	$20.07
ME	$7.40	$7.28	$1.60		$1.07	$4.61
MD	$18.02	$19.93	$7.34	$4.49	$2.57	$5.53
MA	$34.45	$28.00	$10.00			$18.00
MI	$34.29	$42.36	$14.60	$6.70		$21.30
MN	$17.46	$16.67		$8.30		$8.37
MS	$13.74	$12.70	$1.34	$1.25		$10.11
MO	$19.87	$16.76	$2.08	$2.86		$11.82
MT	$4.55	$3.68			$1.05	$2.63
NE	$7.42	$0.75		$0.65		$0.10
NV	$4.08	$5.18	$0.35		$0.08	$4.75
NH	$4.69	$4.45		$0.98	$0.44	$3.03
NJ	$37.15	$35.00				$35.00
NM	$6.59	$7.50		$0.10		$7.40
NY	$77.93	$70.00		$7.60	$6.00	$56.40
NC	$22.59	$21.00				$21.00
ND	$3.69	$3.64	$1.00			$4.50
OH	$37.82	$26.00			$10.50	$15.50
OK	$12.43	$12.67	$0.60	$0.02	$2.20	$9.85
OR	$9.97	$11.31		$1.74	$0.60	$8.97
PA	$46.86	$21.50	$14.40			$7.10
RI	$3.99	$3.62	$2.20			$1.42
SC	$12.00	$10.60		$1.00	$1.00	$8.60
SD	$3.60	$3.85			$0.12	$3.56
TN	$16.28	$5.00	$1.00			$4.00
TX	$74.25	$70.50	$7.00		$5.00	$58.50
UT	$5.94	$5.00				$5.00
VT	$2.41	$1.56		$1.35		$0.21
VA	$25.83	$20.60			$20.00	$0.60
WA	$15.37	$15.98	$1.00	$1.14	$1.88	$11.05
WV	$6.01	$5.65			$0.25	$5.40
WI	$17.71	$17.50			$2.10	$15.40
WY	$4.10	$4.12	$1.10		$0.26	$2.76
TOTALS:	$990.36	$868.03	$106.73	$57.36	$79.33	$666.18

STRIPPER WELL: LOW INCOME USES
[NUMBERS IN MILLIONS]

TABLE 5

FEBRUARY, 1989

STATE	AMOUNT RECEIVED 3/86-1/89	AMT. ALLOC.	PCT. OF RECD. FUNDS ALLOC.	LIHEAP	LIHEAP PCT.	DOE WAP	WAP PCT.	OTHER LOW-INC	OTHER LOW-INC PERCENT	TOTAL LOW-INC. AMT.	TOTAL LOW-INC PERCENT
AL	$15.44	$15.29	99%	$2.27	15%		0%		0%	$2.27	15%
AK	$3.89	$0.00	0%		0%		0%		0%	$0.00	0%
AZ	$10.32	$9.93	96%		0%		0%	$3.80	38%	$3.80	38%
AR	$12.81	$12.53	98%	$2.08	17%	$2.92	23%		0%	$5.00	40%
CA	$92.13	$90.96	99%	$15.50	17%		0%		0%	$15.50	17%
CO	$10.82	$10.72	99%		0%	$2.01	19%	$1.68	16%	$3.69	34%
CT	$17.09	$18.35	107%		0%		0%	$4.92	27%	$4.92	27%
DE	$4.78	$4.15	87%		0%	$1.00	24%		0%	$1.00	24%
DC	$2.40	$2.20	92%	$0.06	3%		0%	$0.68	31%	$0.74	34%
FL	$46.50	$33.85	73%		0%	$13.25	39%		0%	$13.25	39%
GA	$22.41	$22.45	100%	$4.25	19%		0%	$3.75	17%	$8.00	36%
HI	$6.91	$1.00	14%		0%		0%		0%	$0.00	0%
ID	$4.13	$3.82	92%		0%		0%	$0.16	4%	$0.16	4%
IL	$46.22	$46.05	100%	$11.50	25%		0%		0%	$11.50	25%
IN	$24.79	$22.64	91%	$2.28	10%		0%	$3.16	14%	$5.44	24%
IA	$13.11	$11.03	84%		0%		0%	$0.35	3%	$0.35	3%
KS	$11.28	$2.87	25%		0%		0%	$0.11	4%	$0.11	4%
KY	$12.90	$4.76	37%	$3.18	67%		0%	$0.58	12%	$3.76	79%
LA	$23.94	$25.09	105%		0%		0%	$5.02	20%	$5.02	20%
ME	$7.40	$7.28	98%	$1.60	22%		0%	$1.07	15%	$2.67	37%
MD	$18.02	$19.93	111%	$7.34	37%	$4.49	23%	$2.57	13%	$14.40	72%
MA	$34.45	$28.00	81%	$10.00	36%		0%		0%	$10.00	36%
MI	$34.29	$42.36	124%	$14.60	34%	$6.70	16%		0%	$21.30	50%
MN	$17.46	$16.67	95%		0%	$8.30	50%		0%	$8.30	50%
MS	$13.74	$12.70	92%	$1.34	11%	$1.25	10%		0%	$2.59	20%
MO	$19.87	$16.76	84%	$2.08	12%	$2.86	17%		0%	$4.94	29%
MT	$4.55	$3.68	81%		0%		0%	$1.05	29%	$1.05	29%
NE	$7.42	$0.75	10%		0%	$0.65	87%		0%	$0.65	87%
NV	$4.08	$5.18	127%	$0.35	7%		0%	$0.08	2%	$0.43	8%
NH	$4.87	$4.45	92%		0%	$0.98	22%	$0.19	4%	$1.42	29%
NJ	$37.15	$35.00	94%		0%		0%		0%	$0.00	0%
NM	$6.59	$7.50	114%		0%	$0.10	1%		0%	$0.10	1%
NY	$77.93	$70.00	90%		0%	$7.60	11%	$6.00	9%	$13.60	19%
NC	$22.59	$21.00	93%		0%		0%		0%	$0.00	0%
ND	$3.69	$3.64	99%	$1.00	27%		0%		0%	$1.00	27%
OH	$37.82	$26.00	69%		0%		0%	$10.50	40%	$10.50	40%
OK	$12.43	$12.67	102%	$0.60	5%	$0.02	0%	$2.20	17%	$2.82	22%
OR	$9.97	$11.31	113%		0%	$1.74	15%	$0.60	5%	$2.34	21%
PA	$46.86	$21.50	46%	$14.40	67%		0%		0%	$14.40	67%
RI	$3.99	$3.62	91%	$2.20	61%		0%		0%	$2.20	61%
SC	$12.00	$10.60	88%		0%	$1.00	9%	$1.00	9%	$2.00	19%
SD	$3.60	$3.85	107%		0%		0%	$0.12	3%	$0.12	3%
TN	$16.28	$5.00	31%	$1.00	20%		0%		0%	$1.00	20%
TX	$74.25	$70.50	95%	$7.00	10%		0%	$5.00	7%	$12.00	17%
UT	$5.94	$5.00	84%		0%		0%		0%	$0.00	0%
VT	$2.41	$1.56	65%		0%	$1.35	87%		0%	$1.35	87%
VA	$25.83	$20.60	80%		0%		0%	$20.00	97%	$20.00	97%
WA	$15.37	$15.98	104%	$1.00	6%	$1.14	7%	$1.88	12%	$4.02	25%
WV	$6.01	$5.65	94%		0%		0%	$0.25	4%	$0.25	4%
WI	$17.71	$17.50	99%		0%		0%	$2.10	12%	$2.10	12%
WY	$4.10	$4.12	100%	$1.10	27%		0%	$0.26	6%	$1.36	33%
TOTALS	$860.16	$868.03	99%	$106.73	12%	$57.36	7%	$79.33	9%	$243.42	28%

STRIPPER WELL: OTHER USES
(NUMBERS IN MILLIONS)

TABLE 6

FEBRUARY, 1989

STATE	AMOUNT RECEIVED 3/86-1/89	AMOUNT ALLOCATED	OTHER PROGRAMS	SEE REF TABLE
AL	$15.44	$15.29	$13.02	akl
AK	$3.89	$0.00		
AZ	$10.32	$9.93	$6.13	degntr
AR	$12.81	$12.53	$7.53	amq
CA	$92.13	$90.94	$116.00	an
CO	$10.82	$10.72	$7.03	adegipru
CT	$17.09	$18.35	$13.42	acdejknopr
DE	$4.78	$4.15	$3.15	j
DC	$2.40	$2.20	$1.46	dfklru
FL	$46.50	$33.85	$20.60	h
GA	$22.41	$22.45	$14.45	acdfghjlmporu
HI	$6.91	$1.00	$1.00	d
ID	$4.13	$3.82	$3.66	abdfhjmpr
IL	$46.22	$46.05	$34.55	dmu
IN	$24.79	$22.64	$17.20	ak
IA	$13.11	$11.03	$10.68	acfhjr
KS	$11.28	$2.87	$2.76	ah
KY	$12.90	$4.76	$1.00	m
LA	$23.94	$25.09	$20.07	afr
ME	$7.40	$7.28	$4.61	cdefjklmpru
MD	$18.02	$19.93	$5.53	cdejklpr
MA	$34.45	$28.00	$18.00	cdu
MI	$34.29	$42.36	$21.30	ehikru
MN	$17.46	$16.67	$8.37	fghirkl
MS	$13.74	$12.70	$10.11	afhjimpr
MO	$19.87	$16.76	$11.82	imr
MT	$4.55	$3.68	$2.63	dhjkr
NE	$7.42	$0.75	$0.10	r
NV	$4.08	$5.18	$4.75	aenr
NH	$4.69	$4.45	$3.03	jrt
NJ	$37.15	$35.00	$35.00	dp
NM	$6.59	$7.50	$7.40	jmnr
NY	$77.93	$70.00	$56.40	acdfghijkmpr
NC	$22.59	$21.00	$21.00	u
ND	$3.69	$3.64	$4.50	bjmpr
OH	$37.82	$26.00	$15.50	acu
OK	$12.43	$12.67	$9.85	aefginopu
OR	$9.97	$11.31	$8.97	a
PA	$46.86	$21.50	$7.10	cdehmprs
RI	$3.99	$3.62	$1.42	acdjklpqtr
SC	$12.00	$10.60	$8.60	dhjklp
SD	$3.60	$3.85	$3.56	aeghjr
TN	$16.28	$5.00	$4.00	jkp
TX	$74.25	$70.50	$58.50	aijmnru
UT	$5.94	$5.00	$5.00	fqjr
VT	$2.41	$1.56	$0.21	br
VA	$25.83	$20.60	$0.60	q
WA	$15.37	$15.98	$11.05	abcdhjnpu
WV	$6.01	$5.65	$5.40	a
WI	$17.71	$17.50	$15.40	abcdfhjmnpr
WY	$4.10	$4.12	$2.76	adfhnpru
TOTALS	$990.36	$868.03	$666.18	

REF.	TABLE
a	bridge and road repair and other transportation projects (van pools, public transit uses, etc.)
b	traffic signal synchronization
c	energy conservation projects for non-profits
d	residential energy conservation uses
e	projects for older persons
f	demonstration projects
g	alternate fuel projects
h	agricultural sector projects
i	university sector projects
j	state/local government energy conservation programs
k	SECP (State Energy Conserv. Prog.)
l	EES (Energy Extension Service)
m	Schools & Hospitals Weatherization (through ICP or otherwise)
n	Native American uses
o	energy conservation projects for shelters amt. shown in "Other Low Inc."
p	commercial energy conservation uses
q	pooled Exxon & Stripper Well (&/or other overcharge) funds
r	other uses (includes admin. costs)
s	SECP &/or EES
t	technical assistance for a given sector
u	programs targeted, but not exclusively, for low-income uses and projects for low-to-moderate income persons

Senator METZENBAUM. Thank you very much, Mr. Tucker. We appreciate your testimony.

Ms. Duckett, he is here, so we can hear from you.

STATEMENT OF CHERRY DUCKETT, ASSISTANT DIRECTOR, ARKANSAS INDUSTRIAL DEVELOPMENT COMMISSION

Ms. DUCKETT. Thank you, both of you.

Chairman Metzenbaum, Senator Bumpers, I am pleased to have the opportunity to appear before you today to discuss this legislation. My name is Cherry Duckett. I am Deputy Director of the Arkansas Industrial Development Commission. The department includes the Arkansas Energy Office. I am a member of the Executive Committee and the Secretary of the National Association of State Energy Officials, NASEO. Today I am testifying on behalf of NASEO.

As my colleague, Carol Tombari, has stated, we stongly support S. 247. Carol has very effectively described our views on the legislation. I would like to discuss the importance of the State Energy Advisory Board and the home energy rating system as well as certain amendments that we propose.

The board of directors of NASEO met with Secretary Watkins, Deputy Secretary Hanson Moore, Undersecretary John Tuck, and the principal Deputy Assistant Secretary for Conservation and Renewable Energy, Reid Detchon, on April 7, 1989. I was fortunate to attend the meeting, and I want to say publicly how pleased we are as states that the new regime is aggressive and interested in working with us. They have set the right tone, and we intend to work as closely with DOE as possible.

I also want to add that we had the occasion to meet with Reid Detchon while he was serving as President Bush's transition representative for DOE, and we look forward to an immensely positive working relationship.

We have also met with Robert Grady, the new Associate Director for Energy Environment and Science at OMB, and have found him to be very open and interested in these issues. We believe the new administration is interested in working toward a balanced national energy policy that includes energy conservation.

Regarding the State Energy Advisory Board, this discussion of the old and new regime serves as a prelude to why we believe a State Energy Advisory Board makes sense. The State energy offices are not just another interest group. Not only do we operate the State Energy Conservation Program, SECP, EES, and the ICP, but we are engaged in a variety of other activities. Many of the energy offices work on nuclear waste, nuclear waste transportation. Many of the offices have a statutory siting responsibilities for electric transmission lines and natural gas pipelines.

We are involved in coal, oil and gas development and particularly in the new and innovative approaches in these areas.

One of our primary responsibilities through EES and SECP is to disseminate the results of the research and development conducted by DOE's labs to the real world. In short, we believe we can communicate good ideas to the Secretary of Energy. Also equally im-

portant, he and his staff can communicate their views and ideas to us, and we can implement them.

As Carol said earlier, the State Energy Offices are the individuals that implement programs and activities on the local and the State level.

On energy rated homes, S. 247 also adds an optional SECP measure calling for the creation of a uniform home energy rating system. We have developed a program of uniform energy ratings in Arkansas to help increase the public's awareness and understanding of energy efficiency. We are very pleased with this program, which is being instituted in a number of states, and we hope that the addition of the language in this bill will help encourage the creation of these voluntary programs throughout the country.

Senator Bumpers is considering introducing legislation to accelerate the application in the states and would provide technical assistance on the State, local government and utility level. NASEO will be very supportive of this legislation.

In the appeals process, we would like to take this opportunity to propose an amendment to S. 247 that goes to the heart of DOE-State relations. A sensible appeals process must be instituted. We recommend the following procedure on matters involving the four State and local assistance programs, SECP, EES, ICP and Weatherization.

When a support office and state disagree, the state has the right to seek an appeal to the director of the office of State and local assistance program. OSLAP under the Secretary for Conservation and Renewable Energy runs these programs. I maintain it makes sense to have an appeal to an office that knows something about the program. This appeal would hopefully result in affording consistent application of DOE rules among the 10 regions.

A secondary appeal to DOE's Office of Hearings and Appeal also makes sense. The present appeals route established last year ends at the office of hearings and appeals but bypasses OSLAP office. We also believe that the support office would have to make a decision within 60 days, and the director of OSLAP office should have to make a decision appeal within 60 days.

If you wish, I can provide an example of a problem in my own State of Arkansas we have had in the regional office. The regional office is trying to micromanage projects in the State and thereby dictate to the governor and the legislature on a very narrow ground and in great detail of what they are permitted to do on behalf of our citizens. Federalism means very little if the state does not have the opportunity to implement the program.

Thank you, Mr. Chairman, for your time.

[The prepared statement of Ms. Duckett follows:]

Chairman
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(New York)

Vice Chairman
Dr. Donald E. Milsten
(Maryland)

Treasurer
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(District of Columbia)

Secretary
Cherry L. Duckett
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TESTIMONY

OF

CHERRY DUCKETT

OF THE

NATIONAL ASSOCIATION OF STATE ENERGY OFFICIALS

BEFORE THE

SUBCOMMITTEE ON ENERGY REGULATION
AND CONSERVATION

COMMITTEE ON ENERGY AND NATURAL RESOURCES

UNITED STATES SENATE

MAY 2, 1989

Telephone 202-639-8749 613 G Street, N.W., 5th Floor, Washington, D.C. 20001

Chairman Metzenbaum, Subcommittee members, I am pleased to have the opportunity to appear before you today to discuss this fine legislation. My name is Cherry Duckett, Assistant Director of the Arkansas Industrial Development Commission. My Department includes the Arkansas Energy Office. I am a member and the Secretary of the National Association of State Energy Officials (NASEO). Today, I am testifying on behalf of NASEO.

As my colleague Carol Tombari has stated, we strongly support S. 247. Carol has very effectively described our views on the legislation. I would like to discuss the importance of the State Energy Advisory Board, the home energy rating system, as well as certain amendments we propose.

The Board of Directors of NASEO met with Secretary Watkins, Deputy Secretary Henson Moore, Under Secretary John Tuck and the Principal Deputy Assistant Secretary for Conservation and Renewable Energy, Reid Detchon, on April 7, 1989. I had the pleasure to attend that meeting as did Carol Tombari, and I want to say publicly how pleased we are that the new regime is interested in working with the States. They have set the right tone and we intend to work as closely with DOE as possible. I also want to add that we had occasion to meet with Reid Detchon while he was serving as President Bush's transition representative for DOE and we look forward to an immensely positive working relationship. We also had occasion to meet with

Robert Grady, the new Associate Director for Energy, Environment and Science at OMB, and we have found him to be very open and interested in these issues. We believe that the new Administration is interested in working towards a balanced national energy policy that includes energy conservation.

I do not wish to dwell on the past but for the last few years the previous Administration was simply not interested in working with the States in this area. They showed open hostility towards the State and Local Assistance Programs (SLAP). Their view was that no Federal appropriations were needed for these programs. Unfortunately, they took that one step further and did not communicate with the States because they felt that might somehow provide the programs with some legitimacy. Needless to say, that attitude set-back national energy policy. Congress preserved these programs, in large part due to Senator Metzenbaum's efforts, as well as strong support from the Appropriations Committee, including especially Senator Bumpers from my State.

State Energy Advisory Board

This discussion of the old and the new regime serves as a prelude to why we believe a State Energy Advisory Board makes sense. The State energy offices are not just another interest group. Not only do we operate the State Energy Conservation Program (SECP), the Energy Extension Service (EES) and the Institutional Conservation

Program (ICP), but we are engaged in a variety of other activities. Many of the energy offices work on nuclear waste and nuclear waste transportation. Many of our energy offices have statutory siting responsibilities for electric transmission lines and natural gas pipelines. Many of our energy offices are involved in coal, oil and gas development, and especially innovative approaches in this area.

One of our primary responsibilities, through EES and SECP, is to disseminate the results of the research and development conducted by DOE's laboratories to the real world. We take this responsibility seriously, and we especially have focused on delivery to small and medium-sized businesses that can utilize the technologies but without us would not know how to find it. These businesses do not have the large engineering staffs of our major corporations. Many of our energy officials are engineers and economists. Some of our members are serving on an advisory board to the Energy Engineering Board of the National Academy of Sciences.

I cannot stress enough the importance of this energy office function of disseminating the results of the work of DOE's laboratories to the business world. We take this responsibility seriously and we believe the State Energy Advisory Board could help us relay the needs of business, and the needs of the public generally, to DOE to help focus the work of the labs. We understand that

Senator Domenici has a keen interest in this area of technology transfer and we look forward to working with him and his staff to develop a suitable amendment to S. 247 to further encourage this function.

The energy offices are also directly involved in energy emergency planning and integrated energy planning. The energy offices have also been promoting pollution mitigation in areas such as radon control programs, rebates for energy efficient appliances and efficient motors, waste oil recycling, resource recovery, telecommuting, alternative motor fuels, etc. Many of the State energy offices have the responsibility to update building codes, and energy efficiency standards have begun to be included in these codes. We also work with and encourage utilities to engage in sensible, broad-based energy conservation programs.

In short, we believe we can communicate some good ideas to the Secretary of Energy. Also, and equally important, he and his staff can communicate their views and ideas to us and we can implement them. As Carol Tombari said earlier, the State energy offices are the individuals that implement programs and activities on the local and state level.

This concept is not new. EPA set-up a State Advisory Board composed of State environmental officials from each of the ten EPA regions. They have been meeting with the Administrator on a regular basis over the past

few years. It is my understanding that both EPA and the States are very pleased with this system.

We are also suggesting a trade; eliminate one Board and create another. S. 247 eliminates the EES Advisory Board, which has been composed of political appointees without a great deal of expertise in the energy field. We believe a Board of the type proposed in this bill is necessary to ensure that the lines of communication stay open with DOE. Frankly, we think the information exchange will be beneficial to both the States and the Federal government and may even create some innovative solutions.

Energy Rated Homes

S. 247 also adds an optional SECP measure calling for the creation of a uniform home energy rating system. We have developed a program of uniform energy ratings in Arkansas to help increase the public's awareness and understanding of energy efficiency. We are very pleased with this program which is being instituted in a number of states and we hope that the addition of the language in this bill will help encourage the creation of these voluntary programs throughout the country. We understand that separate legislation may be introduced to encourage the creation of a home energy rating system. It is very important that we work closely with realtors, builders, financial institutions and others in the development of such a program. It has been successful in Arkansas.

Appeals Process

We would like to take this opportunity to propose an amendment to S. 247 that goes to the heart of DOE/State relations. A sensible appeals process must be instituted. This issue strikes close to home, because DOE's problems in this area have prevented a sound energy project from being implemented in my home State of Arkansas.

DOE has ten regional offices, and these so-called Support Offices are responsible for monitoring and approving programs implemented in nearby states. My office reports to the Dallas Support Office. These Support Offices spend over 95% of their time on the State energy programs. These Support Offices then report to DOE's Operations Offices. For the Dallas Support Office, the Operations Office is in Albuquerque. Another example is the Atlanta Support Office, which reports to Savannah River. The Operations Offices then report to the Under Secretary of Energy. Unfortunately, some Operations Offices know next-to-nothing about the State energy programs. In these cases, if a State has a dispute with a Support Office, the Operations Office defers to the Support Office since it does not understand the programs. It is as if the appeal is heard by the trial judge. This is not due process.

Correspondence between Congressman Sharp, Chairman of the House Energy and Power Subcommittee, and DOE last

year confirmed that this is how the process allegedly works. Well, it does not work and it makes no sense.

We recommend the following procedure. On matters involving the four State and Local Assistance Programs, SECP, EES, ICP and Weatherization, when a Support Office and a State disagree, the State has the right to seek an appeal to the Director of the Office of State and Local Assistance Programs (OSLAP). OSLAP, under the Assistant Secretary for Conservation and Renewable Energy, runs SECP, EES, ICP and Weatherization. Doesn't it make sense to have an appeal to an office that knows something about the program? This appeal might actually have the effect of affording consistent application of DOE's rules among the ten regions.

A secondary appeal to DOE's Office of Hearings and Appeals makes sense. The present appeals route established last year ends at the Office of Hearings and Appeals but bypasses the SLAP office.

We also believe that the Support Office should have to make a decision within sixty days and the Director of the SLAP office should have to make a decision on the appeal within sixty days.

If you wish, I can provide you with a real life example of a problem my own State of Arkansas has with the Dallas Support Office. Dallas is trying to micro-manage projects in our State and thereby dictate to the Governor and Legislature on very narrow grounds and in great detail

what they are permitted to do on behalf of our citizens. Federalism means very little if a State does not have the opportunity to actually implement programs.

In sum, I hope we have the opportunity to work with you to craft appropriate legislative language as soon as possible. Could this issue of an appeal be corrected by DOE without legislation? The answer is yes. Unfortunately, it has not yet been done.

ICP Amendments

1) Technical Assistance Funds

States have begun to institute a number of innovations both through ICP and through State programs that complement ICP. For example, Iowa established a School Energy Bank Program, which arranges for so-called master lease financing of energy projects in schools. ICP's existing rules prevent effective melding of these alternative state-initiated programs.

Language has been included in recent Interior and Related Agencies Appropriation Bills to help address this problem. Senator Hatfield has been very helpful in this regard. We would propose that S. 247 be amended to permit up to 100% of the Federal ICP funds to be used for technical assistance analyses of schools and hospitals, provided that funds for the technical analyses constitute no more than 15% of available funds to conduct the actual energy retrofits of the buildings. This amendment would be conditioned

on the availability of funds for all schools and hospitals and that such activities would occur throughout the year. The amendment would also permit the federal ICP funds to be used to leverage private capital. We have prepared language and we look forward to discussing it with your staff prior to mark-up.

2) Passage of Title

We would also propose a technical amendment to Section 7(a) of the bill which would permit legal title to the equipment purchased with the non-federal share (the matching funds) to pass to the school or hospital after the ICP grant is completed. Specifically, at the end of Section 7(a) of S. 247 (page 11, line 10), the following phrase would be added: "even if title to the equipment does not pass to the school or hospital until after the ICP grant is completed." This amendment will freely permit the implementation of performance contracting activities as envisioned by the bill. Needless to say, lending institutions are very concerned about passage of title.

3) Eligible Buildings

The ICP Statute defines eligible buildings for purposes of receiving conservation measures as structures completed "on or before April 20, 1977." S. 247 proposes updating this to December 31, 1984. We would suggest a date of May 1, 1989. This would obviously allow buildings constructed in the recent

past to be eligible, which is especially important in fast-growing regions. It would also avoid the necessity of revisiting the statute in the near future. On the other hand, this date, as opposed to the date of enactment or some future date, eliminates any incentive to build energy inefficient structures in order to become eligible for the ICP program.

SECP Definitions

We propose certain amendments to the Definitions section of the SECP statute. These amendments are necessary, in large part, because the statute has not been amended since 1978. First of all, definitions of an eligible "energy conservation measure" and a "renewable energy measure" are restricted to modifications of buildings completed before August 14, 1976. 42 U.S.C. § 6326(4) and (6). We believe that in both instances this should be May 1, 1989.

Second, we would like eligible "conservation measures" to include cost-saving measures such as demand management devices. Such measures do not necessarily save energy, but they save energy dollars and can offset the need for power plant additions. For example, the State of Texas estimates that power factor correcting capacitors installed at some prison facilities will save $16,000 monthly and would pay for themselves in seven months by improving load factor rather than saving energy. In 42 U.S.C. § 6326(4), we propose adding references to

"building system, energy consuming device associated with the building." Also, to take into account these load management devices, we would propose to substitute "or" for "and" in the same section. The new provision would read as follows:

> (4) The term "energy conservation measure" means a measure which modifies any building, building system, energy consuming device associated with the building, or industrial plant, the construction of which has been completed prior to May 1, 1989, if such measure has been determined by means of an energy audit or by the Secretary, by rule under section 6325(e)(1) of this title, to be likely to improve the efficiency of energy use or to reduce energy costs (as calculated on the basis of energy costs reasonably projected over time, as determined by the Secretary) in an amount sufficient to enable a person to recover the total cost of purchasing and installing such measure. . . .

Technology Applications Project

We have worked with the Weatherization program representatives to develop a proposal which they will discuss in greater detail. The purpose of this amendment is to encourage DOE to conduct more intensive evaluations of technologies and measures which increase energy efficiency. This so-called "Technology Applications Project" is also intended to distribute the results of these efforts to State energy offices, State weatherization offices and local providers.

I might add that in my own State of Arkansas the Weatherization program has been quite effective. We

recognize the important relationship between the State energy office and the Weatherization program and these programs are complementary.

Conclusion

I want to reiterate our strong support for S. 247. It is time to change the underlying statutes to allow more innovations to occur. Our suggested amendments build upon the basic structure of the bill and should help stimulate more sound energy investments.

Senator METZENBAUM. Thank you very much, Ms. Duckett. Your entire statement will be included in the record.

Senator Bumpers, I do not know if you have any opening statement.

Senator BUMPERS. I do not, Mr. Chairman. Thank you.

Senator METZENBAUM. I have just a few questions, probably one for each of the panelists.

Mr. Tucker, under DOE rules no measures related to cooling efficiency are allowable. Can you please give us some examples of the cooling measures you would like to see authorized under the program and, if you would be good enough to do so, describe the Oklahoma field test of cooling measures funded under DOE.

Mr. TUCKER. Thank you, Senator. The field tests that are being done in Oklahoma are being included as a part of my report. I am not familiar enough to discuss it.

However, the cooling measures have long been a very serious problem in Oklahoma because of the extreme heat. The statistics have shown that there are more fatalities from heat than there are from cold in our particular state.

We would like to have the opportunity to carry out some of those recommendations from this study as the heat barrier that is being studied.

Senator METZENBAUM. Do you think that you might have some further response on the cooling measures that you would advocate by the time we move this legislation forward? If so, we would be pleased to hear from you. I will put it that way.

Mr. TUCKER. Senator, I really do not other than the same measures to a large extent that we do for heat do have an effect. We have a particular problem in Oklahoma due to the wind that creates movement through the house. When a home is stopped from infiltration, then that conserves the energy in the cooling effort the same as it does in the heating effort.

The study also includes some work that is being done with high efficiency air conditioners, and we would hope that that could be attained and be affordable within the program for some of the very low income.

Senator METZENBAUM. Thank you very much, Mr. Tucker.

Mr. Concannon, it is pretty well accepted that Massachusetts runs one of the very best weatherization programs in the country. Other states do not do all well.

Can you offer some recommendations as to how to better encourage the other states to improve their programs, and how have you done it? Does the performance fund actually have to encourage program improvement in your state?

If you can answer all of that in about a minute or so, I would be grateful.

Mr. CONCANNON. Thank you for your commendation, Senator.

I think that part of the reason Massachusetts has done as well as it has done with its energy conservation programs is a commitment not only from the State personnel in the program but the subgrantee personnel as well to serve low income people to a maximum degree possible.

I think that if you have the client at heart, you will continue to find ways that are technically advanced, that save money and that protect your investment.

I think that it demands a dedication to the program not just in terms of social service delivery but looking into the program each year for a fine tuning; to not be content with what we do but to move forward.

I would invite other states to have a public process that does that that includes the subgrantees and includes poor persons saying this is what we need in our homes.

I would invite other states to approach the gas industry, the oil industry, the utility industry to say what can we do and how can you help us to achieve this.

Relative to the performance fund, while clearly I think the state would have benefited from it, the funding maximum never was such that we did receive anything from it, and we do support its elimination.

Senator METZENBAUM. Thank you very much.

Mr. Lee, you allude to the fact that conservation programs that were effective in the 1970s may not continue to be so in the 1990s.

What suggestions would you make for improving existing programs, and can you suggest potential new programs for addressing energy efficiency?

Mr. LEE. I would suggest, first of all, that one of the major problems in the 1990s is this linkage between energy efficiency and the protection of our environment.

Senator METZENBAUM. The linkage between——

Mr. LEE. Energy efficiency and the protection of our environment.

The fact that a number of our key environmental issues today, acid rain, the global warming problems, the issues of transported ozone which are dominating our political agenda, are directly related to fuel use. As you begin to have to address these, one of the measures to address them, I think, that has been well represented in some legislation filed by Senator Wirth is to develop energy efficiency programs to deal with the problems of air emissions.

I think that you need to link a lot of these conservation programs to the need to protect our environment. To do so, you should set up a process at the State level that forces State environmental officials to work closely with State energy officials. I believe the State of New York has already begun a program in this area, but unless you bring these two groups together they will both work in parallel but very separate directions. I think it is essential that they be brought together.

The second thing is I think you need to look at incentives. The whole question of providing incentives to states so that they begin to develop the most effective program possible, if you have a limited resource pie, limited dollars, limited staff, it is important to ensure that those resources are used most effectively and you get the most energy savings for the dollar invested.

I think the only way to do that is with positive incentives for the state, and I have outlined a couple of them in my testimony.

Senator METZENBAUM. Thank you very much, Mr. Lee.

Ms. Duckett, other witnesses from the DOE suggested that the State Energy Advisory Board should have fewer State energy officials and more members from Federal labs, utilities, regulatory agencies, financial institutions and the private sector.

Do you agree that communications would be enhanced by a broader membership, and how do you perceive the role of the State Energy Advisory Board? How can it help us to achieve a balanced national energy policy?

Ms. DUCKETT. Mr. Chairman, I think the critical issue here is that the advisory board is being looked at. I think it is very important. I have worked in energy programs since 1976, and as long as the lines of communication are informal and not institutionalized, they are greatly impacted by personalities, change of people, et cetera.

I think that the need has never been greater for an institutional formal line of communication. I think the energy offices as a group bring probably as broad a perspective as you can bring together. I am not so sure on the numbers at this point is that all perspectives are included and that we are looking at the entire picture. We are more or less the pivot point at this time. We are supposed to take what the labs issue and get out to the people.

We have had far too many good things happen in our labs that no one knows about or are well kept secrets. I think we are that conduit, and I think we are there and stabilized.

Senator METZENBAUM. Thank you.

Ms. Tombari, in their statement DOE maintains that oil overcharge funds provide ample resources for State energy conservation programs.

Would you agree with that statement?

Ms. TOMBARI. Not at all, Senator. DOE also says that 95 percent of the oil overcharge funds have already been allocated. They have been allocated not by bureaucrats but by governors and by legislatures. Those people consider that they have looked at the restitutionary needs of their constituents and that they have put the funds into those programs.

It is very difficult to go back for whatever reason and ask them to change their allocation if not enough money is going into these programs through the budgetary process.

There also is a fundamental difference in the fundamental purpose of these funds, and that is that the oil overcharge funds were intended to be restitutionary. That does not mean that other programs and funds going to the citizens were to be taken away so that these funds could supplant them. They were intended to supplement them.

So I disagree with the DOE statement.

Senator BUMPERS. Mr. Chairman, that is an excellent question. That is just the very point that we fight with the administration around here about all the time. Every time there is any money coming from any other source, they use that as an opportunity to cut funding which has existed in the past.

I just came from an Appropriations Subcommittee on Interior where Admiral Watkins, our new Secretary of Energy, was testifying very precisely on this point by saying that they were not

asking for any additional money for State energy conservation programs because the oil overcharge funds were more than adequate to take care of it. It was almost as though saying the States can sort of as 50 separate entities solve the national conservation problems. Well, the states can do a lot but they cannot formulate a national energy conservation policy.

We are going to go for an increase in CAFE standards. The Senators are taking a lead in that. There are a whole host of national conservation guidelines that we have to formulate because we are dealing with a whole host of new issues. Energy conservation cannot be just energy conservation anymore. You have to remember the global warming effect. You have to remember ozone depletion. You have to do all those things that are international in scope.

So I am very pleased with your answer, Ms. Tombari. I think your answer is precisely correct. The Reagan Administration and now the Bush Administration is using the oil overcharge funds. Of course, we have more coming from Texaco now.

Incidentally, how much money have you all had? Are your from Texas?

Ms. TOMBARI. Yes, I am from Texas.

Senator BUMPERS. Well, you do not sound like a Texan, but how much money have you all gotten out of the Exxon overcharge fund?

Ms. TOMBARI. From Exxon, $157 million.

Senator BUMPERS. Do you have all of it yet?

Ms. TOMBARI. Yes. From Exxon, we have received all of it. Texaco will still be coming in over the next five years.

Senator BUMPERS. So how much do you anticipate from that?

Ms. TOMBARI. That will probably be about $30 million to Texas.

Senator BUMPERS. Do you agree with Cherry that the Dallas office tries to micromanage?

Ms. TOMBARI. I agree with Cherry, yes.

Senator BUMPERS. Cherry, is our Medicreek project still on hold, or is it dead, or what?

Ms. DUCKETT. I hope it is not dead, Senator, but it definitely is on hold. I have documentation here from when I was asked; 22 formal transactions have taken place in the last nearly 18 months, and the ball is currently in their court.

Senator BUMPERS. Mr. Chairman, you know they want an appeals process very badly because they think, for example—I do not know whether the other witnesses are having these kinds of problems with the regional offices or not, but the people who deal with the Dallas office, you have just heard Ms. Tombari and Cherry both testify that the Dallas office is acting in what they consider to be a very arbitrary and capricious way. We have spent more money in the Washington office furnishing paperwork that has been required than the entire $75,000—how much was it, Cherry?

Ms. DUCKETT. Down to $76,000 at this point.

Senator BUMPERS. $76,000 for a solar demonstration project. I will not go into details. It is called the Medicreek project, and there are all kinds of exciting things there.

We have spent more money answering their questions and furnishing paper than we asked for for the project, and we still do not have it approved and probably never will.

The reason they are asking for a better appeals process is to take it out of the hands and at least give somebody else a chance to look at it when they feel they have been wronged on their request for spending money.

Is that a fair statement, Cherry?

Ms. DUCKETT. And people who have some knowledge of the program.

Senator BUMPERS. Are these political appointees down there who know nothing?

Ms. DUCKETT. Well, when you leave that office, when you leave the regional office, you are talking to Albuquerque, which effectively has no knowledge of the program whatsoever. More critical, the people who wrote the program and dealt with the very specific issues in it are totally circumvented from the process and have no input whatsoever.

Senator BUMPERS. How much money have we gotten from the overcharge fund?

Ms. DUCKETT. Total will be in the neighborhood of $27 to $30 million right now. Texaco has started coming in. Our Texaco allotment is much less than theirs. It is probably going to be less than $6 million, and it will dribble in.

Senator BUMPERS. Are you already getting some Texaco money?

Ms. DUCKETT. Yes. We have had two awards at this point, but they will come in at about $1 million plus each over the next five years.

Senator BUMPERS. What is going to happen when all this overcharge money is gone and the Feds are not picking up anything?

Ms. DUCKETT. You are going to have a lot of programs that will collapse.

Senator BUMPERS. How do you coordinate the weatherization program that you get from these overcharge funds with the weatherization program that the Federal Government sponsors?

Ms. DUCKETT. The weatherization program, as you know, in Arkansas is not under the energy office directly. It works with the CAP energies. The oil overcharge money, our process involves the governor and the joint committee on energy. We funnel money into weatherization through that process.

Senator BUMPERS. Thank you, Mr. Chairman.

Senator METZENBAUM. I very much appreciate the cooperation of the witnesses. I think I as well as other members of the committee may have some questions before we go to final markup.

I would say to the Department of Energy that this question of the appeals process, if you cannot figure out a procedure that is workable on your own we can draft an amendment to put into this bill before it goes to the floor. I would hope that you can do it without our having to put additional legislative language in.

Having said that, unless Senator Bumpers has anything further——

Senator BUMPERS. I do not think they can do it. I think we are going to have to put it in the bill. But then I agree with your statement.

Senator METZENBAUM. Any other questions?

Senator BUMPERS. No.

Senator METZENBAUM. Thank you very much. The hearing stands adjourned.

[Whereupon, at 3:15 p.m., the hearing was adjourned.]

APPENDIXES

APPENDIX I

Responses to Additional Questions

Department of Energy
Washington, DC 20585

June 29, 1989

The Honorable Howard M. Metzenbaum
Chairman
Subcommittee on Energy Regulation
and Conservation
Committee on Energy and Natural Resources
United States Senate
Washington, D.C. 20510

Dear Mr Chairman:

On May 2, 1989, Dr. John R. Berg, Assistant Secretary for Conservation and Renewable Energy appeared before your subcommittee to discuss S. 247, the State Energy Conservation Programs Improvement Act of 1989.

Following that hearing, you submitted written questions including questions on behalf of Senator Don Nickles for our response to supplement the record. Enclosed are the answers to those questions. A copy of the responses to Senator Nickles' questions have also been sent to him.

If you have any questions, please have your staff call Frances Bryant on 586-4277. She will be happy to assist.

Sincerely,

Rebecca A. Thompson

for Robert G. Rabben
Assistant General Counsel
for Legislation

Enclosures

POST-HEARING QUESTIONS AND ANSWERS

RELATING TO THE

MAY 2, 1989

HEARING BEFORE THE

COMMITTEE ON ENERGY AND NATURAL RESOURCES

SUBCOMMITTEE ON REGULATION AND CONSERVATION

UNITED STATES SENATE

WITNESS: DR. JOHN R. BERG

ASSISTANT SECRETARY FOR CONSERVATION AND RENEWABLE ENERGY

QUESTIONS FROM SENATOR METZENBAUM

Question 1(a): What is the total energy savings of the four SLAP programs outlined in S. 247? What other benefits do these programs offer?

Answer: Each of the four programs have achieved energy savings. Because post-retrofit data is not regularly collected by the grantees, it is extremely difficult to determine with a high degree of certainty what actual energy savings are attributable to this program. The Department of Energy has made an attempt to perform such a study; however because of methodology and data limitations, its energy savings estimates must be used with care. A recently completed national evaluation of ICP shows a cumulative estimated energy savings of 317 trillion BTU's, or a cumulative financial savings of $1.9 billion, based on refined estimates by professional architects and engineers. For WAP, average heating energy savings are estimated to be 14%, or average annual savings per home weatherized of about 2.6 barrels of oil equivalent, based on a 1981-1982 sampling. WAP also provides health and comfort benefits for the low-income elderly and handicapped. Cumulative energy savings from SECP/EES, based on annual energy savings reports submitted by the States, are estimated to be 4.23 quads through FY 1987. States calculate energy savings using similar methodology but apply the methodology to individual state specific programs that are unique to each state. In addition to specific energy savings, SECP and EES have led to the establishment of an

energy planning network at the state and local level, and, through the outreach and educational activities carried out by States, they have assisted in the development of an energy efficiency ethic across the country.

QUESTIONS FROM SENATOR METZENBAUM

Question 1(b): Does DOE consider these programs to be cost-effective?

Answer: Because no recent cost-effectiveness evaluations have been undertaken for some of these programs it is impossible to state whether or not these programs are cost-effective. The Department is reviewing the need for such evaluations in conjunction with its review of the need for energy savings studies.

QUESTIONS FROM SENATOR METZENBAUM

Question 1(c): Are certain programs or measures more effective than others?

Answer: The programs are designed for different audiences, to address different needs, and each is effective in its own way. ICP and WAP are targeted toward buildings-oriented conservation measures, and both programs have achieved energy savings in their target groups. SECP/EES have enabled States to design and implement broad, state-wide energy conservation and outreach programs to address each State's specific energy needs, and the States report that energy savings have been achieved.

QUESTIONS FROM SENATOR METZENBAUM

Question 1(d): How can DOE ensure that the benefits of these programs are "real and long-lasting"?

Answer: Over the 12 years that these programs have been in operation, we have seen the growth of an energy efficiency ethic across the country--people are now aware of and adopting energy efficient practices in their homes and businesses. Many States and local governments have developed multi-year plans to address energy needs. Over 1.8 million low-income homes have been retrofitted through WAP, and client education programs are carried out to ensure that the savings will be maintained. Through ICP, energy conservation measures have been installed in 29,000 school and hospital buildings, and energy engineering studies have been performed in over 32,000 buildings. These activities lead not only to permanent energy conservation benefits in the buildings, but also to an increased awareness of energy conservation on the part of the school children and their families. Also over the last few years, the operation of these programs has led to the establishment and growth of the "shared-savings" industry, an industry which enables energy conservation activities to be supported through innovative financing mechanisms not dependent on Federal funding.

QUESTIONS FROM SENATOR METZENBAUM

Question 1(e): What steps is the Department taking to ensure that the best State programs and state-of-the-art technologies are being introduced throughout the country?

Answer: DOE carries out a variety of technology transfer activities to make information available about effective conservation programs and state-of-the-art technologies. A recent Demand-Side Management Conference sponsored by DOE was attended by over 600 people, representing 150 utilities, engineering firms and State and local governments. DOE also publishes "Conservation Update" monthly, to disseminate information about innovative State programs and the latest technology developments. In addition, DOE sponsors national and regional conferences to provide networking opportunities for program managers and implementers at the State and local level. DOE also operates an electronic bulletin board accessible to anyone across the country to provide information on State energy conservation programs supported with oil overcharge funds.

QUESTIONS FROM SENATOR METZENBAUM

Question 2(a): You say that oil overcharge funds "provide ample resources" for State energy conservation. How much oil overcharge funding has been made available to the States so far?

Answer: The States have received $3.8 billion to date from the resolution of all oil overcharge cases, of which $200 million was distributed under the terms of the Warner Amendment, $2.1 billion came from settlement of the Exxon oil overcharge case and $1 billion has been distributed under the Stripper Well Settlement Agreement.

QUESTIONS FROM SENATOR METZENBAUM

Question 2(b): How much of the total was allocated to each of the four SLAP programs? Please provide total and percentages.

Answer: As of May 1, 1989, $1.975 billion has been allocated by the States to the four SLAP programs. By program, the funding totals and percentages are as follows:

PROGRAM	FUNDING($/M)	% OF TOTAL
SECP	$ 775.2	39.3%
EES*	137.2	6.9%
WAP	673.4	34.1%
ICP	389.5	19.7%

*in some cases, EES allocations are reported in combination with SECP.

QUESTIONS FROM SENATOR METZENBAUM

Question 2(c): How much remains to be allocated to the States?

Answer: It is estimated that $500-650 million in oil overcharge funds will be distributed to the States, in the future, for use in these programs.

QUESTIONS FROM SENATOR METZENBAUM

Question 2(d): How much can the SLAP program reasonably be expected to receive in the future from oil overcharge funds? How many years do you expect these funds to last and should these expected funds substitute for direct Federal grants to the States?

Answer: It is estimated that the States will receive $500-650 million, mainly over the next five years, under the terms of the Stripper Well Settlement Agreement. The States will determine the allocation of these funds among the eligible conservation programs, which include the SLAP programs and others. These funds may last a year or two beyond the date of the last distribution, since most States have adopted multi-year spending plans. These funds represent a stable and ample source of funds for the SLAP programs over the next several years.

QUESTIONS FROM SENATOR METZENBAUM

State and Local Assistance Programs

Question 3(a): You state that the State Energy Conservation Goal of a 10 percent reduction by 2000 is "unrealistic, unreasonable, and counterproductive."

Could you suggest language which might establish a more flexible goal toward which states could strive?

Answer: Based on the Department's experience with the goals established in the original SECP legislation, it is believed that for a variety of reasons, a legislatively mandated, quantitative goal is not practical. Instead, a more generally defined target can be set in legislation.

QUESTIONS FROM SENATOR METZENBAUM

State and Local Assistance Programs

Question 3(b): Are there some states that may be able to achieve the 10 percent reduction goal?

Answer: Clearly, it may be possible for some States to reduce their energy consumption by 10 percent. An adverse event, causing sudden economic distress, could accomplish such a goal in an undesirable way.

QUESTIONS FROM SENATOR METZENBAUM

State and Local Assistance Programs

Question 3(c): Might not a 10 percent 'per capita' reduction in energy consumption make states in the grip of economic recession more competitive with their more economically sound counterparts?

Answer: A 'per capita' standard would not seem to affect this in any signigicant way.

QUESTIONS FROM SENATOR METZENBAUM

State and Local Assistance Programs

Question 4(a): You propose the elimination of the provision requiring 40 percent of weatherization funds be used for the purchase of materials. Are you concerned that the elimination of this rule may lead to abuses within the program?

Answer: We do not believe that elimination of the 40 percent rule would lead to program abuse. We believe that DOE's monitoring and training and technical assistance activities, combined with periodic Federal audits of State programs, provide an adequate safeguard against potential abuses.

QUESTIONS FROM SENATOR METZENBAUM

State and Local Assistance Programs

Question 4(b): What provisions would you suggest be enacted that could help to prevent potential abuses and avoid 'inevitable' delays?

Answer: The "State Energy Conservation Programs Improvement Act of 1989" (S. 247, H.R. 711) currently being considered by the Congress would provide for a waiver of the requirement that 40 percent of weatherization funds be used for materials; waivers could be granted by DOE on a State-by-State basis. We suggest elimination of the 40 percent requirement for the following reasons.

First, we share the Committee's concern that the requirement, as it now stands, frequently provides an incentive not to install the most appropriate weatherization measure(s). For instance, storm windows, on the average, result in annual energy savings of only 5 percent and a payback period of about 27 years; they should not be generally prescribed. They are, however, a materials-intensive measure and are sometimes installed in order to meet the 40 percent requirement. Labor intensive measures, e.g., furnace retrofit (average annual savings of 18 percent and payback of 2 years) may, for the same reason, be overlooked.

We believe, given the high degree of experience and professionalism which now exists among State and local weatherization program implementers, that they are

Answer 4(b)
Continued: the appropriate persons to decide which measures will be most effective in a given circumstance. A waiver provision, as opposed to elimination of the requirement, would require DOE to review and second guess the decisions of those State and local officials with the most immediate knowledge and expertise. The waiver provision contained in the proposed legislation would, itself, result in "inevitable" delays; elimination of the requirement would not.

QUESTIONS FROM SENATOR METZENBAUM

Question 5(a): Could you please provide examples of cooling measures currently being studied by the Department?

Answer: DOE is currently involved in several weatherization research efforts to field test the effectiveness of installing two potentially effective measures - attic radiant barriers and replacing room air conditioners with high-efficiency units.

QUESTIONS FROM SENATOR METZENBAUM

Question 5(b): Will the field tests be completed in the near future and what conclusions are they likely to offer?

Answer: We expect these projects to be completed by the end of 1989. Until these projects are completed, no conclusions can be drawn.

QUESTIONS FROM SENATOR METZENBAUM

Question 6(a): The Department's report on the 1988 program says the Weatherization program has changed substantially in recent years through the adoption of new technology and management techniques. On what basis was this statement made?

Answer: The statement was made on the basis of (1) a soon to be released comparative analysis of State program evaluations; (2) a 1987 Oak Ridge National Laboratory study, "Weatherization Assistance for Low-Income Households; An Evaluation of Local Program Performance;" (3) materials and background compiled for a report, now in process, to the Senate Appropriations Committee; and (4) information gathered through program monitoring, training, and other oversight activities.

QUESTION FROM SENATOR METZENBAUM

Question 6(b): When was the last independent national evalution of the Weatherization program conducted?

Answer: The last independent national evaluation of the impact of the weatherization program was conducted in 1984 and covered homes weatherized in 1981.

QUESTIONS FROM SENATOR METZENBAUM

Question 6(c): Does the Department have plans to complete another comprehensive evaluation of the Weatherization program in the near future?

Answer: As of the moment, the Department has not developed any plans for another comprehensive program evaluation. However, the report to the Senate Appropriations Committee mentioned above will indicate that a need exists for such an evaluation, and the Department is planning to look at options for how and at what cost a comprehensive program evaluation could be done.

QUESTIONS FROM SENATOR METZENBAUM

State and Local Assistance Programs

Question 7: Assume the establishment of a State Advisory Board with 25 percent of the board consisting of State agency directors responsible for developing state energy plans.

What does the Department feel would be an effective balance of members for the remaining positions on the board?

Answer: The Department of Energy recommends that the membership of the Board consist of a minimum of 15 and not more than 20 members, and that 75 percent of the membership consist of representatives of small business, agriculture, transportation, industry, local government, educational and research institutions, financial institutions, consumer interest groups, community service action agencies, utilities and public utility commissions. The Department also recommends that membership be geographically balanced. Every effort should be made to select representatives who have some knowledge of or experience in energy efficiency or renewable energy programs.

QUESTIONS FROM SENATOR METZENBAUM

Question 8: Does the appeals process currently authorize state energy agencies to appeal to headquarters in Washington?

Answer: An appeals process currently operates for three OSLAP programs, the State Energy Conservation Program, Energy Extension Service, and Weatherization Assistance Program, under 10 CFR 420.9, 465.10 and 440.30. The process is under review in the Department with the expectation that a new policy, establishing formal appeals procedures for all four OSLAP programs, will be put in place by the Secretary in the near future.

QUESTIONS FROM SENATOR METZENBAUM

State and Local Assistance Programs

Question 9: What impact do you feel the merger of SECP and EES, as called for in S. 247, will have on the activities of the EES?

Answer: Over the last five years, the Department has actively promoted the consolidation of SECP and EES State grant applications and plans. The Department has brought both programs' regulations and operating procedures into a high degree of conformance, and the States have been encouraged to establish compatible EES outreach programs for SECP activities. In many States, the staffs of both programs already are located in the same organization. Thus, the proposed merger, requiring the mandatory inclusion of EES functions under SECP, should have no adverse impact on the national EES program.

QUESTIONS FROM SENATOR METZENBAUM

State and Local Assistance Programs

Question 10(a): What has been the nature of the relationship between the Secretary and state energy officials? How many times has the Secretary met with state energy officials?

Answer: Secretary Watkins met with representatives of the National Association of State Energy Officials shortly after his confirmation. In addition, members of the Secretary's staff have met on several occasions with State energy officials. Those meetings have been cordial and resulted in an open exchange of information and views.

QUESTIONS FROM SENATOR METZENBAUM

State and Local Assistance Programs

Question 10(b): Do you foresee any changes in this relationship under the new Administration?

Answer: We would expect such meetings between the Secretary and State energy officials to continue. The Secretary invited the active participation of State Energy Officials in the formation of an integrated national energy strategy.

QUESTIONS FROM SENATOR METZENBAUM

Question 11(a): The OSLAP office in Washington sets program guidelines. DOE support offices make decision on individual state plans and programs. These support offices do not report back to OSLAP and Washington in the chain of command, but instead to operations offices such as Savannah River which are essentially weapons plants and R & D facilities.

Does this system make sense?

Answer: The Department historically is structured with the Operations Offices, which have administrative responsibility for the Field Offices, reporting to the Secretariat. The Program Offices work through the Operations Offices to effect Headquarters policy and guidelines.

QUESTIONS FROM SENATOR METZENBAUM

Question 11(b): Does DOE have any plans to review this chain of command issue?

Answer: Yes. This issue is under active review at this time.

QUESTIONS FROM SENATOR METZENBAUM

Question 12: Mr. Detchon, currently, states have the right to appeal decisions made by the regional support offices on these programs, but there is not an appeals process for the schools and hospitals program.

Does the department have plans to review the various appeals processes and extend them to ICP?

Answer: The Department is presently reviewing the OSLAP appeals process.

Any new appeal process will include the Institutional

Conservation Program as well as the other OSLAP programs.

QUESTIONS FROM SENATOR NICKLES

Weatherization Assistance Programs

Question 1: Would you comment for the Record on the comments I recently received by letter of April 21, 1989, from Donald D. Paulsen, Executive Director of the Oklahoma Department of Commerce commenting on S. 247?

Answer: The Department is not currently contemplating a revision in its WAP allocation formula, absent a change in statute. Any change in the allocation formula could result in reduced funding for some States with the result that many well established, well run programs (at both the State and local levels) would be severely disrupted.

QUESTIONS FROM SENATOR NICKLES

Weatherization Assistance Programs

Question 2(a): What currently are the best available technologies for air conditioning or cooling buildings? What is the estimated energy efficiency of such systems?

Answer: One of the major factors in determining the energy savings effectiveness of cooling season measures for the Weatherization Assistance Program is the cost of energy used for cooling low-income homes. Many low-income homes only have electric fans which circulate air, but do not cool the house. The relatively low-cost of operating these fans results in a very minor potential for cost-effective cooling season measures. Those homes, particularly in hot and humid climates, that have typical window or central air conditioning systems have a relatively high energy cost for cooling and good potential for cost-effective cooling season measures. Significant benefits result from replacing an old air conditioner with a new high efficiency air conditioner. Similarily, measures that either reduce the infiltration of hot, humid air into the house or prevent the heat from the sun entering the house have economic potential when the costs of air conditioning are relatively high. Homes in climates that are hot and dry that use evaporative coolers have a significantly smaller potential due to lower energy costs for cooling than with the typical window or central air conditioning systems.

QUESTIONS FROM SENATOR NICKLES

Weatherization Assistance Program

Question 2(b): What improved air conditioning or cooling technologies are now being field tested? How were these technologies selected?

Answer: The Department is presently involved in several weatherization research efforts to determine the effectiveness of installing attic radiant barriers and replacing room air conditioners with high-efficiency units. These two measures were selected because of their high potential for cost-effectiveness in warm climates.

QUESTIONS FROM SENATOR NICKLES

Weatherization Assistance Program

Question 2(c): How many dwelling units are now eligible for weatherization efficiency modification assistance? How many of these units have air conditioning or cooling systems? What is the estimated energy efficiency of such systems?

Answer: Presently we estimate 18 million households remain eligible for assistance under the DOE weatherization program. Based upon the DOE Residential Energy Conservation Survey we estimate 7.3 million of those households have air conditioning, nearly two-thirds of which are window units. The Department does not have a report on the energy efficiency of these units or other cooling systems. If the air conditioning units are old, particularly window units, they would be energy inefficient compared to new units.

QUESTIONS FROM SENATOR NICKLES

Weatherization Assistance Program

Question 2(d): What do low-income persons now spend on air conditioning or cooling? What other air conditioning or cooling costs are now being incurred?

Answer: The Department does not have a report on low-income costs for air conditioning or cooling. U.S. Census Bureau data, however, indicates for the residential sector as a whole that, in the South where homes are more likely to be air conditioned than in the North (77% versus 51%), energy expenses for an electrically heated home with an air conditioner will be, on average, 29% more than for a home without an air conditioner.

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United States Senate
COMMITTEE ON
ENERGY AND NATURAL RESOURCES
WASHINGTON, DC 20510-6150

May 5, 1989

The Honorable John R. Berg
Assistant Secretary
Conservation and Renewable Energy
U.S. Department of Energy
Washington, D.C. 20585

Dear Mr. Berg:

Thank you for your expert testimony presented at the Committee's May 2 hearing on S.247, the State Energy Conservation Programs Improvement Act of 1989. I have enclosed several questions from Committee members to be answered for inclusion in the hearing record. Please submit your responses to these questions to the Committee by May 23, 1989.

In addition, you will receive a copy of the printed hearing record as soon as it becomes available.

Sincerely,

Howard M. Metzenbaum
Chairman, Subcommittee on
Regulation and Conservation

HMM/aks

Enclosure

QUESTIONS FOR JOHN R. BERG
DEPARTMENT OF ENERGY

1. What is the total energy savings of the four SLAP programs outlined in S. 247? What other benefits do these programs offer?

* Does DOE consider these programs to be cost-effective?

* Are certain programs or measures more effective than others?

* How can DOE ensure that the benefits of these programs are "real and long-lasting"?

Follow-up:

* What steps is the Department taking to ensure that the best state programs and state-of-the-art technologies are being introduced throughout the country?

2. You say that oil overcharge funds "provide ample resources" for state energy conservation.

* How much oil overcharge funding has been made available to the states so far?

* How much of the total was allocated to each of the four SLAP programs? Please provide total and percentages.

* How much remains to be allocated to the states?

* How much can the SLAP programs reasonably be expected to receive in the future from oil overcharge funds? How many years do you expect these funds to last and should these expected funds substitute for direct Federal grants to the states?

3. You state that the State Energy Conservation Goal of a 10 percent reduction by 2000 is "unrealistic, unreasonable, and counter-productive".

* Could you suggest language which might establish a more flexible goal toward which states could strive?

* Are there some states that may be able to achieve the 10 percent reduction goal?

* Might not a 10 percent 'per capita' reduction in energy consumption make states in the grip of economic recession more competitive with their more economically sound counterparts?

4. You propose the elimination of the provision requiring 40 percent of weatherization funds be used for the purchase of materials.

* Are you concerned that the elimination of this rule may lead to abuses within the program?

* What provisions would you suggest be enacted that could help to prevent potential abuses and avoid 'inevitable' delays?

5. Could you please provide examples of cooling measures currently being studied by the Department?

* Will the Department's field tests be completed in the near future and what conclusions are they likely to offer?

6. The Department's report on the 1988 program says the Weatherization program has changed substantially in recent years through the adoption of new technology and management techniques. On what basis was this statement made?

* When was the last independent national evaluation of the Weatherization Program conducted?

* Does the Department have plans to complete another comprehensive evaluation of the weatherization program in the near future?

7. Assume the establishment of a State Advisory Board with 25 percent of the board consisting of State agency directors responsible for developing state energy plans.

* What does the Department feel would be an effective balance of members for the remaining positions on the Board?

8. Does the appeals process currently authorize state energy agencies to appeal to headquarters in Washington?

9. What impact do you feel the merger of SECP and EES, as called for in S. 247, will have on the activities of the EES?

10. What has been the nature of the relationship between the Secretary and state energy officials? How many times has the Secretary met with state energy officials?

* Do you foresee any changes in this relationship under the new Administration?

1. The OSLAP Office in Washington sets program guidelines. DOE support offices make decisions on individual state plans and programs. These support offices do not report back to OSLAP and Washington in the chain of command, but instead to operations offices such as Savannah River which are essentially weapons plants and R & D facilities.

--Does this system make sense?

--Does DOE have any plans to review this chain of command issue?

2. Mr. Detchon, currently, states have the right to appeal decisions made by the regional support offices on these programs, but there is not an appeals process for the schools and hospitals program.

--Does the department have plans to review the various appeals processes and extend them to ICP?

May 2,1989

HEARING ON S. 247

QUESTIONS FOR DEPARTMENT OF ENERGY

QUESTIONS FROM SENATOR NICKLES

1. Would you comment for the Record on the comments I recently received by letter of April 21, 1989, from Donald D. Paulsen, Executive Director of the Oklahoma Deparment of Commerce commenting on S. 247? (Copy of letter is attached for the Record.)

2. a. What currently are the best available technologies for air conditioning or cooling buildings? What is the estimated energy efficiency of such systems?

   b. What improved air conditioning or cooling technologies are now being field tested? How were these technologies selected?

   c. How many dwelling units are now eligible for weatherization efficiency modification assistance? How many of these units have air conditioning or cooling systems? What is the estimated energy efficieny of such systems?

   d. What do low-income persons now spend on air conditioning or cooling? What other air conditioning or cooling costs are now being incurred?

OKLAHOMA
DEPARTMENT OF COMMERCE

HENRY BELLMON
GOVERNOR

DONALD D. PAL
EXECUTIVE DIR

April 21, 1989

E. L. Stewart
Office of the Governor
State Capitol Building
Oklahoma City, Oklahoma 73105

Thank you for the opportunity to comment on this significant legislation. Four programs, the Weatherization Assistance Program (WAP), the Energy Extension Service (EES), the Institutional Conservation Program (ICP) and the State Energy Conservation Program (SECP), have been styled by the Department to contribute to the state's support of community and business development.

Under the State Energy Conservation Program and the Energy Extension Service, several programs, with the addition of Oil Overcharge funds provided by the Governor, are designed to directly support business and rural communities, e.g.:

- Interest Subsidy Program. Works with lenders to "buy down" the interest rate to small businesses making energy improvements.

- Small Business Demonstration Program. Will help businesses to try innovative energy saving measures.

- Rural Small Business Audit Program. Utilizes state Rural Electric Cooperatives Association to perform energy audits on rural businesses.

(If you would like additional information on any of these programs, please let me know.)

The proposed changes on SECP make emergency energy planning a mandatory activity. While we wholeheartedly agree with the need for this activity, Senator Nickles should be advised that this will be an expensive undertaking. We would endorse the recommended changes in the legislation for SECP and EES.

6601 Broadway Extension • Oklahoma City, Oklahoma 73116-8214
Telephone: 405-843-9770 • Telex: 350352

The Institutional Conservation Program is providing much needed assistance to the infrastructure of schools and hospitals across the state. We would endorse the recommended changes in the legislation for this program.

The Weatherization Assistance Program provides home energy conservation measures to qualified residences. We would endorse the recommended changes in the legislation for this program.

I believe it is important that Senator Nickles be advised of the following concerning these programs and their impact on Oklahoma:

1. The Weatherization Assistance Program is designed to reduce the energy costs for qualified residences. The formula for the distribution of these funds was skewed intentionally by the Department of Energy in favor of northern states. The attached position paper outlines the issues.

   We recommend that Senator Nickles request that the Secretary of Energy create an equitable distribution of the funds.

2. Existing legislation and the legislation, as proposed, allow that furnace efficiency modifications are eligible activities under the Weatherization Assistance Program. In southern states, air conditioning operating costs are a significant portion of low-income persons' energy expenditures; however, the law does not allow that air conditioning or cooling efficiency modifications can be made in order to reduce both the energy usage and the cost to our clients.

   We recommend that Senator Nickles seek changes in the law and in DOE regulations to allow for efficiency modifications on cooling-related equipment in the same manner that furnace efficiency modifications are addressed.

If you have any questions, please contact Sherwood Washington of my staff, at (405) 841-9326.

Donald D. Paulsen
Executive Director

DDP/mjw
Enclosures

Position Paper

WEATHERIZATION ASSISTANCE PROGRAM
ALLOCATION FORMULA

Oklahoma Department of Commerce
6601 Broadway Extension, Building #5
Oklahoma City, Oklahoma 73116-8214
(405) 843-9770

INTRODUCTION

The Low-Income Weatherization Assistance Program administered by the U.S. Department of Energy (DOE) has, according to 42 USCS §6861, two basic objectives. They are:

1. To aid those persons least able to afford higher utility costs (the adverse effect of higher energy costs); and
2. To conserve needed energy.

To accomplish these objectives, Congress directed the Secretary of Energy to:

> "...allocate financial assistance to each state on the basis of the relative need for weatherization assistance among low-income persons throughout the states, taking into account the following factors:
>
> A. The number of dwelling units to be weatherized;
> B. Climatic conditions in the state respecting energy conservation, which may include consideration of annual degree days;
> C. The type of weatherization work to be done in various settings; and
> D. Such other factors as the Secretary may determine necessary in order to carry out the purpose and provisions of this part."

The allocation formula devised by DOE to fulfill Congressional intent is defined in 10 CFR Part 440.14 (b) (2). The elements of the formula are as follows:

(i) the square of the number of heating degree days in a state multiplied by the percentage of total residential energy used for space heating;
(ii) plus the square of the number of cooling degree days in the state multiplied by the percentage of total residential energy used for space cooling;
(iii) multiplied by the sum of the number of low-income, owner-occupied dwelling units in the state and one-half renter-occupied;

(iv) divided by the sum of the results produced for all dates by the computation outlined in paragraphs (i), (ii) and (iii); and

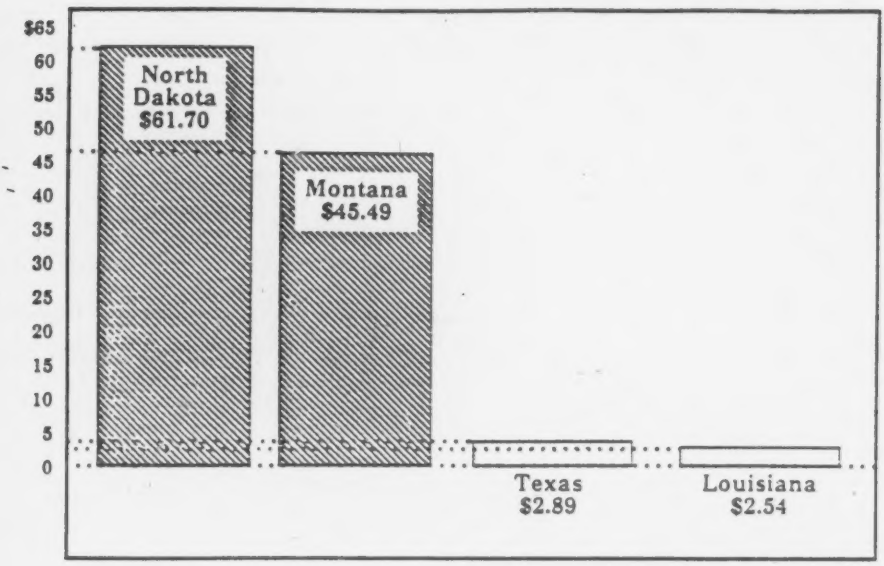
(v) multiplied by 100.

If the formula is designed to give equal treatment to each program objective, then it is logical to assume that there would be an obvious connection between the climatic conditions and number of eligible dwelling units within a state and its allocation. Unfortunately, the relationship between a state's allocation, as determined by the current formula, and the number of eligible dwelling units within its borders is not readily discernible. The purpose of this paper is to call attention to the inadequacy of the present formula and to suggest a more equitable formula for allocating funds to achieve the objectives of the program.

DISCUSSION

When states are categorized as shown in Table A, it becomes apparent that the current allocation formula denies states in the Southern and Western regions of the nation an equal opportunity to contribute to the achievement of program objectives. In Fiscal Year 1985, states in the South and West received allocations totalling $49,453,940 --- 26 percent of all funds allocated, even though their combined eligible population accounted for 56 percent of all eligible dwelling units. As the following charts indicate, the disparity can be even greater on a state-by-state basis.

DOLLARS ALLOCATED PER DWELLING UNIT



	ELIGIBLE UNITS	ALLOCATIONS	$ ALLOCATED PER UNIT
North Dakota	36,900	2,276,904	$61.70
Montana	47,340	2,153,804	45.49
Texas	858,120	2,481,398	2.89
Louisiana	319,380	813,609	2.54

The current allocation formula contains three basic elements. They are heating and cooling degree days, the percentage of total residential energy used for heating and cooling, and the number of eligible dwelling units. The discrepancy between the amount allocated and the number of eligible dwelling units is the result of the

emphasis placed on heating and cooling degree days by the current formula. Within the formula, the total number of heating degree days and the total number of cooling degree days for each state are squared before calculation of relative allocation percentages begins. Squaring exaggerates the importance of degree days and significantly reduces the impact of the other two elements on the amount allocated to each state.

RECOMMENDATION FOR CHANGE

The current formula biases the distribution of program funds in favor of Northern states. The rationale for this bias is that: (1) Northern states use more energy for residential heating, and (2) weatherization costs are higher in the North than in the South and West. Unfortunately, such a rationale provides insufficient justification for skewing the distribution of funds to the degree caused by the squaring of degree days. Regional differences in the amount of energy used for residential heating are already reflected in the actual number of heating and cooling degree days (see Table B) and the weights assigned to energy used for heating (.578) and cooling (.033) within the formula. Furthermore, a study completed by the Economic Opportunity Research Institute in March, 1986, revealed no significant regional differences in the average expenditures per unit weatherized. For example, in Fiscal Year 1984, North Dakota spent an average of $976 per unit, while Texas averaged $1,036 per unit weatherized.

It is therefore recommended that the Secretary of Energy take whatever action is necessary to eliminate the squaring of degree days from the Weatherization Assistance Program allocation formula. The formula would then more accurately reflect the differences in the need for weatherization among states in terms of related energy usage and the number of eligible dwelling units; encourage more balanced achievement of program objectives; and provide states in the South and West with an equal opportunity to contribute to the achievement of these objectives.

Table A

North

Eligible Units = 5,578,921
Allocations = 137,320,722
Amount Allocated Per Unit $ 24.61

* *The Bold Line Indicates the Geographical Boundary Between States That Gain and States That Lose From The Squaring of Degree Days*

South and West

Eligible Units = 7,034,660
Allocations = 49,453,940
Amount Allocated Per Unit $7.03

TABLE B — THE CURRENT ALLOCATION FORMULA VERSUS — Page 1

THE SAME FORMULA WITHOUT SQUARING DEGREE DAYS.

Section 1							Section 2	
State Allocations[1]		Percentage of Total Allocation	% of Total Eligible Dwelling Units	Eligible[2] Dwelling Units	Heating[3] Degree Days	Cooling[4] Degree Days	HEATING & COOLING DEGREE DAYS NOT SQUARED - CHANGES	
							Funding %	Dollars
01. Hawaii	$ 170,574	0.008	0.3	43,300	0	3,528	0.013	+ 9,344
02. Nevada	512,793	0.198	0.2	33,680	4,251	1,568	0.250	+ 97,170
03. Delaware	560,553	0.225	0.2	29,140	4,739	1,032	0.254	+ 54,191
04. Florida	592,312	0.243	4.9	624,940	686	3,391	1.009	+ 1,431,383
05. District of Col.	662,968	0.273	0.3	44,680	4,702	1,015	0.310	+ 69,140
06. Arizona	668,960	0.285	1.1	145,180	2,285	2,635	0.655	+ 691,399
07. Louisiana	813,609	0.366	2.5	319,380	1,704	2,643	1.088	+ 1,349,163
08. Wyoming	907,416	0.418	0.1	18,481	7,997	312	0.277	-263,480
09. Mississippi	1,090,002	0.519	1.8	235,700	2,396	2,237	1.151	+ 1,180,985
10. South Carolina	1,146,290	0.551	1.6	211,620	2,665	1,892	1.106	+ 1,037,099
11. Rhode Island	1,151,614	0.554	0.4	52,620	5,919	465	0.497	-106,513
12. Vermont	1,278,961	0.624	0.2	28,420	7,951	292	0.416	-388,679
13. New Mexico	1,327,958	0.727	0.7	90,540	4,734	928	0.820	+ 173,784
14. New Hampshire	1,502,627	0.749	0.3	38,600	7,553	303	0.526	-416,708
15. Arkansas	1,621,170	0.815	1.6	207,520	3,253	1,903	1.343	+ 986,646
16. Utah	1,673,413	0.844	0.4	57,800	6,499	658	0.691	-285,903
17. Alabama	1,694,324	0.855	2.5	321,960	2,692	2,005	1.699	+ 1,577,138
18. Idaho	1,809,495	0.920	0.4	53,600	6,887	423	0.709	-394,285
19. Georgia	1,887,250	0.963	3.0	385,680	2,685	1,862	1.919	+ 1,786,426
20. Alaska	1,904,504	0.970	0.1	20,020	12,012	8	0.427	-1,014,675
21. Oklahoma	1,930,676	0.987	1.7	215,860	3,515	2,029	1.506	+ 969,828
22. Kansas	2,039,522	1.047	0.9	123,420	4,894	1,586	1.146	+ 184,996
23. South Dakota	2,052,075	1.054	0.4	50,800	7,611	854	0.737	-592,361
24. Montana	2,153,804	1.111	0.3	47,340	8,192	253	0.719	-732,510
25. North Dakota	2,276,904	1.179	0.2	36,900	9,449	456	0.662	-966,090
26. Oregon	2,343,124	1.216	1.0	134,660	5,219	202	1.235	+ 35,505
27. Nebraska	2,362,292	1.227	0.6	86,040	6,335	1,142	1.033	-362,518
28. Maryland	2,373,959	1.233	1.3	171,940	4,782	1,015	1.377	+ 269,085
29. Texas	2,481,398	1.293	6.8	858,120	1,985	2,696	3.362	+ 3,866,229
30. Connecticut	2,504,661	1.306	0.9	115,100	6,124	526	1.133	-323,276

1 Source: Department of Energy FY85 Tentative Allocation

TABLE B

THE CURRENT ALLOCATION FORMULA VERSUS THE SAME FORMULA WITHOUT SQUARING DEGREE DAYS

Section 1							Section 2	
State Allocations[1]		Percentage of Total Allocation	% of Total Eligible Dwelling Units	Eligible[2] Dwelling Units	Heating[3] Degree Days	Cooling[4] Degree Days	HEATING & COOLING DEGREE DAYS NOT SQUARED - CHANGES	
							Funding %	Dollars
31. West Virginia	2,513,882	1.311	1.0	135,160	5,135	844	1.361	+ 93,433
32. Maine	2,972,112	1.566	0.5	70,160	7,923	228	1.047	-969,828
33. North Carolina	3,037,610	1.602	3.1	396,700	3,382	1,453	2.541	+ 1,754,659
34. Virginia	3,228,395	1.708	2.1	273,040	4,280	1,112	2.135	+ 797,912
35. Tennessee	3,359,647	1.781	2.7	343,920	3,825	1,466	2.497	+ 1,337,951
36. Kentucky	3,674,917	1.957	2.2	278,780	4,422	1,267	2.368	+ 768,014
37. Washington	3,818,504	2.037	1.5	200,680	5,586	174	1.932	-196,208
38. Colorado	4,023,380	2.151	1.0	132,320	7,052	335	1.617	-997,857
39. Iowa	4,582,484	2.461	1.1	146,640	6,836	911	1.917	-1,016,544
40. California	4,664,102	2.507	8.7	1,107,000	2,714	772	4.943	+ 4,552,022
41. Missouri	5,057,948	2.726	2.4	302,740	5,032	1,370	2.898	+ 321,408
42. New Jersey	5,135,925	2.769	2.4	311,660	5,385	794	2.740	-54,191
43. Indiana	5,359,525	2.893	2.0	251,880	5,537	981	2.689	-381,204
44. Massachusetts	6,022,243	3.746	2.1	275,300	6,275	446	2.957	-1,474,362
45. Wisconsin	7,356,315	4.004	1.6	204,820	7,603	551	2.796	-2,257,325
46. Minnesota	9,505,441	5.199	1.5	192,960	8,732	491	3.159	-3,812,039
47. Ohio	10,773,116	5.904	4.2	532,060	5,811	813	5.411	-921,243
48. Illinois	11,663,013	6.398	4.3	544,720	6,102	969	5.589	-1,511,735
49. Pennsylvania	12,493,656	6.855	4.7	602,960	5,788	722	6.304	-1,029,624
50. Michigan	12,645,209	6.945	3.4	437,440	6,801	601	5.427	-2,836,605
51. New York	19,392,033	10.696	8.4	1,069,600	5,940	656	9.579	-2,087,278

1 Source: Department of Energy FY85 Tentative Allocation
2, 3, 4 Source: Department of Energy.

ENERGY AND ENVIRONMENTAL POLICY CENTER
HARVARD UNIVERSITY • JOHN F. KENNEDY SCHOOL OF GOVERNMENT
79 JOHN F. KENNEDY STREET • CAMBRIDGE, MASSACHUSETTS 02138

ANSWERS TO THE QUESTIONS FROM THE SENATE SUBCOMMITTEE ON ENERGY REGULATION AND CONSERVATION

Henry Lee
Executive Director
Energy and Environmental Policy Center

1) What is the role of the state energy offices in the dissemination of energy research and development?

I am not sure what you mean by the question. Are you referring to disseminating R&D in the way the North Carolina Alternative Energy Council funds small R&D projects in the state or are you talking about disseminating the results of R&D?

State governments do not usually do a good job funding R&D because they find it difficult to attract and maintain technical expertise at the agency level. Successful state R&D operations tend to structure themselves as quasi-public corporations or authorities -- one step removed from the normal state government structure.

The advantage of state R&D "corporations" is that the money usually goes to research which is perceived as providing local benefits. On the other hand, State programs find it very difficult to get the economies of scale that are needed to make significant breakthroughs.

Rather, I would urge the Committee to focus on disseminating the results of R&D. In other words, have DOE maintain the lead in funding R&D and then establish a liaison

operation with the states in which the results of R&D are disseminated to the states for further dissemination to users.

EPA has established such programs for hazardous waste clean-up and source reduction technologies. In some instances, EPA hires a consulting company which is responsible for providing the information to the states. In others, it sets up regional computer banks, from which state officials can obtain substantial amounts of information.

I would think DOE could establish a similar operation for conservation and smaller-scale production technology.

2) Do weatherization programs ease the value of substandard owner-occupied housing?

To the extent you lower the cost of operating a home, you increase its value. Also, since many of these improvements are capital intensive, the asset (ie. the home) increases in value.

For many homes, however, non-energy investments may at the margin be more valuable. For example, if you have a home that needs a thousand dollars worth of plumbing, but instead federal monies are used to install storm windows, you have not made the optimal investment.

This questions touches on a very tough issue, ie. should the federal government provide housing assistance which includes an energy component or do you provide energy assistance which happens to improve housing values.

3a) Should there be more interaction between state energy offices and environmental agencies?

Yes. The experience in New York has demonstrated quite clearly that there are enormous benefits to be obtained from persuading state energy officials to sit down with their environmental counterparts. In most states, very little of this occurs, even though in almost every instance states will claim otherwise.

Further, as I mentioned in my testimony, energy and environmental issues are now inextricably linked in the public's mind. If the Committee wants to put out a bill that will have strong public support (ie. have a good chance of obtaining reasonable authorization levels), then it should stress this linkage.

3b) Is improved energy efficiency a reasonable policy for improving environmental air quality?

In areas in which a marginal kilowatt of electricity is generated by coal (ie. the Midwest and parts of the Southeast), there is a direct correlation between energy efficiency and reduced air emissions. I am told that TVA has just finished a major study demonstrating this fact and that the state government of Michigan has done some research on this issue. In areas in which the incremental kilowatt hour is produced by natural gas, the relationship is not as strong. In other words, every BTU saved does not have the same effect on emissions. States should integrate their energy conservation and emission reduction planning processes.

4) What suggestions would I have for improving existing programs and developing potential new programs?

I have made a number of suggestions in my original testimony. My basic message, however, is that you ought to give states flexibility to pursue those options which can produce the greatest amount of energy savings. To insure compliance, I have suggested that Congress mandate an effective evaluation system and that a portion of the funds available to states be awarded to those states which have produced the best results. If state energy offices know they will be evaluated and their funding will be partially tied to the results of this evaluation, they will do a better job than if they were being judged based on compliance with a laundry list of programs mandated by either Congress or DOE.

A key to this approach is that the evaluation be fair and not be done by the states themselves.

The only suggestion in my testimony that I would change would be to have the evaluation process every three years rather than every two. It takes a couple of years to build the human capital and the continuity to effectively deliver conservation programs.

If I was to gaze into a crystal ball and predict what programs will be effective in the nineties, I would suggest that programs linked to other public concerns will do better than those which are not linked. One of the reasons electricity efficiency programs are doing well is that they are perceived as a way of avoiding the externalities associated with building new power plants. Effective energy efficiency programs should be linked to environmental goals. Another emerging focus is transportation policy , an area the State Energy Offices have neglected heretofore. I suspect that transportation decisions in the nineties will be

influenced to a much greater degree by energy and environmental concerns than they were in the eighties and seventies.

5) What impact with the merger of all existing state programs into a single program have on the quality of services and energy savings?

As mentioned above, I think it will dramatically improve services, since states will be judged on results.

The only reason to mandate specific programs is the belief that state governments, if left to their own devices, will not adopt the most cost effective approach, ie they will neglect good programs for provincial reasons. While there will be instances of this attitude, they will be rare. Further, under my recommendations, they would be costly, since states would end up with a program which would not compare well with those pursued by other states. Ergo, they would lose funds.

Another concern is that Congress will find it less appealing to authorize funds to states, if there are no requirements. Again, if one believes that there are national security benefits as well as regional environmental benefits inherent in improving energy efficiency, then one would want to maximize those benefits.

I am, however, realistic enough to know that a completely flexible program, will probably garner less of a constituency and be less likely to receive sufficient authorizations. Therefore, while I may continue to espouse the goal of maximum flexibility, the politically wise choice probably lies somewhere between the existing array of programs and my hands-off approach.

NASEO National Association of State Energy Officials

May 23, 1989

The Honorable Howard M. Metzenbaum
Chairman
Subcommittee on Energy Regulation
and Conservation
Committee on Energy and Natural Resources
SH-212 Hart Senate Office Building
Washington, D.C. 20510

Re: Hearing on S.247/Response to Questions

Dear Chairman Metzenbaum:

On behalf of the National Association of State Energy Officials (NASEO), I am enclosing responses to the written questions which were directed to Carol Tombari and Cherry Duckett as a result of the hearing held on May 2, 1989, to discuss the "State Energy Conservation Programs Improvement Act of 1989." Both these witnesses testified on behalf of NASEO.

Thank you for your strong support of the state energy programs, which S. 247 will improve.

Sincerely,

Jeffrey C. Genzer

cc: Mitch Beaver
Chairman
Frank Bishop
Executive Director
Carol Tombari
Cherry Duckett

Chairman
Mitch Beaver
(Illinois)

Immediate Past Chairman
Charles R. Quinn
(New York)

Vice Chairman
Dr. Donald E. Mitsen
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Van Jamison
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A. ANSWERS OF CHERRY DUCKETT, DEPUTY DIRECTOR, ARKANSAS INDUSTRIAL DEVELOPMENT COMMISSION, TO QUESTIONS RESULTING FROM MAY 2, 1989, HEARING TO DISCUSS THE "STATE ENERGY CONSERVATION PROGRAMS IMPROVEMENT ACT OF 1989"

QUESTION 1. Other witnesses and DOE suggest that the State Energy Advisory Board should have fewer State Energy Officials and more members from Federal labs, utilities, regulatory agencies, financial institutions, and the private sector.

* Do you agree that communications would be enhanced by a broader membership?

* How do you perceive the role of the State Energy Advisory Board and how will it help us to achieve a balanced national energy policy?

ANSWER: Section 6 of S. 247 creates the State Energy Advisory Board, which as presently drafted, would include energy directors as fifty percent of the membership. Other representatives would include at least one director of a State Weatherization program, and other representatives would include "those who have experience in energy efficiency or renewable energy programs for the private sector, consumer interest groups, utilities, public utility commissions, educational institutions, or research institutions." The State Energy Advisory Board thus would include representatives from this broader array of interests.

A group broader than the one presently suggested would be counter-productive. The state energy offices have a unique role in the development and implementation of national energy policy. A comparable board has been created by EPA, which includes representatives from each region of the United States. In the EPA example, they meet with the Administrator and his designees on a regular basis. It must be stressed that the states are not simply another interest group when it comes to energy policy. The state energy offices are concerned not only with state conservation programs, but energy research and development programs, siting of electric plants and transmission lines, siting and development of natural gas lines, nuclear waste disposal and transportation, development of new technologies, energy emergency preparedness, etc. The states are charged with actually implementing programs. The reason the Board was suggested to be broader than the EPA analogue was so that these other individuals could present their views. Yet it must be stressed that these individuals are not generally responsible for implementing programs and managing energy policy on the state level. While we believe communications with these other groups and interests is important it should not have the effect of involving the Board in a morass of other issues.

The second part of this question concerns the role of the Board. We believe that the Board is extraordinarily important. One of DOE's major problems over the past few years has been a lack of communication with the states on many issues, ranging from these energy conservation programs to nuclear waste transportation. While there is no doubt that Admiral Watkins and his able staff have changed the entire tone of the Department to one of openness, the institutionalization of a communications link between the Department and the states will help us move forward in developing a sensible national energy policy. The states are closer to the range of practical, in-state energy problems, and as such have a unique view on what is both practical and achievable.

The energy offices really serve as the foot soldiers in the war waged to address our energy problems and examine our energy future. The states can learn from DOE and DOE can learn from the states. The states have been developing innovative energy programs and the Board will help transfer these ideas.

The role of the states as the extension agents of much of the energy R&D that is disbursed to small and medium-sized businesses is also very important. One role of the Board would be to work with the Department and the DOE labs to relay what has been learned in terms of the needs of this group of entities that will need more support if we wish to become more competitive and also to use the technologies devised by DOE's research program.

QUESTION 2. DOE suggests in its statement that a requirement for emergency planning should not be under a conservation program, but should be a free-standing document or made a part of other emergency planning.

* Do you think this is a reasonable suggestion?

* Do you see any disadvantages?

ANSWER: In general we agree with DOE to the extent that we do not see a need for the actual energy emergency plan to be included as part of the SECP plan. In other words, the energy emergency plan should not have to go through two approvals at the state level. We would suggest a technical amendment to S. 247 to ensure that these dual approvals are not required. We have worked with DOE's energy emergency office staff in developing language that we will submit to the Subcommittee in the near future.

We wish to clarify, however, that these energy emergency plans will be submitted to DOE for informational and coordination purposes only.

QUESTION 3. DOE believes that an across-the-board state energy conservation goal of a 10% reduction in energy consumption for

each State by 2000 is "unrealistic, unreasonable and counterproductive."

* Do you agree, and do you think that the goal should be more flexible to reflect differences among conditions in the states?

ANSWER: It is very important to have a goal for the year 2000. We do not wish to suggest that the states will collectively snap their fingers and achieve a 10% reduction. It will not be easy, and it will be harder for some states than others. On the other hand, as a nation we must try to achieve significant energy efficiency improvements and it is achievable. Cooperation and coordination, as well as the necessary commitment of both federal and state resources, will be required to achieve this energy savings goal.

QUESTION 4. DOE suggests that the mandatory programs of SECP be made discretionary to give states greater flexibility. Do you agree?

* Are there any programs that would be better served by maintaining their mandatory status?

ANSWER: As a general issue of federal-state relations, states would generally support maximum flexibility. On the other hand, with respect to the SECP mandatory programs it is generally felt that these are appropriate as they are generally constructed. In fact, to the best of our knowledge and belief, the right-turn-on-red mandatory SECP feature appears nowhere else in federal law, and we all generally feel that while this has been implemented we would be uncomfortable with any "backsliding" in this regard. The states feel that all of the states should engage in energy emergency planning, and that it should be mandatory on public policy grounds. For example, if state set-aside programs are not consistent, and an energy crisis occurred, then severe interstate shifting of product supplies might occur which could create unwanted and unneeded restrictions on fuel supplies for essential services. Energy emergency planning and coordination is a very important insurance policy for our nation.

QUESTION 5. Could you discuss the role of the state energy offices in the dissemination of energy research and development?

ANSWER: The energy offices work closely with many of the DOE labs, as well as with DOE Headquarter's offices involved in R&D. The energy offices have worked especially closely with Oak Ridge, Sandia, Lawrence Berkeley, Argonne and Pacific Northwest labs. The Office of Buildings and Community Systems, under the Assistant Secretary for Conservation and Renewable Energy, has also worked closely with the states. Many of the energy offices see themselves as the prime dissemination vehicle for energy R&D to businesses and the public at large. The labs do not have sufficient outreach staff, nor the constant contact with the

business community that the energy offices have. The energy offices talk to each other and talk with the labs. There is far more that can be done and should be done. We hope that the State Energy Advisory Board can help in this area, in conjunction with the new level of communication with the Department.

B. ANSWERS OF CAROL TOMBARI, DIRECTOR, GOVERNOR'S ENERGY MANAGEMENT CENTER, TO QUESTIONS RESULTING FROM MAY 2, 1989, HEARING TO DISCUSS THE "STATE ENERGY CONSERVATION PROGRAMS IMPROVEMENT ACT OF 1989"

QUESTION 1. In their statement DOE maintains that oil overcharge funds "provide ample resources" for state energy conservation programs. Would you agree with that statement?

* If so, when would you expect the funding situation to change?

* If not, what funding levels do you expect to have available for programs in the future?

Follow-up:

* Would you please provide the subcommittee with data to support your position.

ANSWER: We could not be in greater disagreement with DOE on this issue. The short answer is that the Department is simply wrong. As the charts which are included below indicate, the oil overcharge refunds received by states since 1981 total approximately $3.5 billion. Of this amount, Exxon($2.1 billion) can only be used for the State and Local Assistance Programs (SLAP) and the Low-Income Home Energy Assistance Program(LIHEAP). The Stripper Well funds($1 billion), and other crude oil cases, including Texaco($430 million in future funds), can also be used for the aforementioned uses, bridge and road repair, etc.

The fact of the matter is that over 95% of the refunds received thus far have been allocated. Furthermore, the SLAP programs, including SECP, EES, ICP and Weatherization, have been cut from a high of $557.6 million in FY'79 to $200 million in FY'89. The funds have remained at the $200 million level during the last three federal fiscal years. There has been no inflation increase. The LIHEAP program has been cut from $2.1 billion in FY'85 to $1.383 billion in FY'89. The Administration has proposed a cut in this program to $1.1 billion in FY'90.

In short, if you add up the cumulative cuts from the base years in the LIHEAP and SLAP programs you exceed the oil overcharge refunds received by states by over $900 million.

In addition, while $3.5 billion has been delivered to the states for restitution to injured parties in oil overcharge refunds thus far, the future distributions are very limited. The Texaco case will provide $430 million through 1994 and the Cities Service case will provide $60 million over 8 years(if the proposed settlement is finalized).

It should also be stressed that these oil overcharge refunds were provided to states in order to compensate classes of consumers injured by oil overcharges in the 1970's. Cutting federal funds because of the existence of oil overcharge refunds turns the concept of restitution on its head. By supplanting federal funds with oil overcharge refunds, you are eliminating restitution to injured consumers.

Finally, once funds have been allocated by the states, which involves approval by the Governor and usually the legislature as well as DOE, states cannot easily reprogram funds in light of federal budget cuts. In addition, to reprogram such funds would violate the court orders in the Exxon and Stripper Well cases, which mandate that these funds be used to supplement and not to supplant federal and state funds.

The chart below illustrates the cumulative reductions:

A. Low-Income Home Energy Assistance Program

Appropriations	Reductions
FY'85 = $2.10 billion	
FY'86 = $2.01 billion	= $90 million
FY'87 = $1.825 billion	= $275 million
FY'88 = $1.53 billion	= $570 million
FY'89 = $1.38 billion	= $720 million

Total Reductions = $1.655 billion

B. State and Local Assistance Program (in millions of dollars)

	Weatherization	SECP	EES	ICP	Appropriations TOTALS	Total Reductions
FY'79	$199	$47.8	$10.7	$300.1	=$557.6	
FY'80	199	37.8	25.0	143.8	= 405.6	$152.0
FY'81	175	30.4	20.0	150	= 375.4	182.2
FY'82	144	24.0	9.6	48	= 225.6	332.0
FY'83	244.9	24.0	10.0	97.6	= 376.5	181.1
FY'84	190.9	24.0	10.0	53.3	= 278.2	279.4
FY'85	191.9	23.5	9.8	47.0	= 272.2	285.4
FY'86	182.0	17.9	7.3	44.9	= 252.1	305.5
FY'87	161.4	9.4	4.0	25.2	= 200.0	357.6
FY'88	161.4	9.4	4.0	25.2	= 200.0	357.6
FY'89	161.4	9.4	4.0	25.2	= 200.0	357.6

Total Reductions = $2.79 billion

QUESTION 2. DOE suggests eliminating subsection (11) regarding the protection of consumers because they feel it is peripheral to conservation. Do you have a problem with eliminating this proposed discretionary program?

ANSWER: While we certainly believe that consumer protection is important, we would not be averse to eliminating this provision. It should be noted, however, that this provision is from the existing statutory language in the Supplemental State Energy Conservation Program.

QUESTION 3. Other witnesses, as well as DOE, suggest that the State Energy Advisory Board should have fewer State Energy Officials and more members from Federal labs, utilities, regulatory agencies, financial institutions, and the private sector. Do you agree that communications would be enhanced by a broader membership on the Board?

* Would you agree with the DOE proposal to limit the membership of state energy officials to 25 percent of the Advisory Board?

ANSWER: As we responded to Question 1 to Ms. Duckett, we believe that it is extremely important to maintain the present minimum number of state officials on the Advisory Board. We hope to work with the Subcommittee and the Department to develop a Board which is of a reasonable size and composition.

QUESTION 4. DOE suggests that the mandatory programs of SECP be made discretionary to give states greater flexibility. Do you agree?

Follow-up:

* DOE suggests that states be allowed to develop their energy emergency plan as part of their other emergency planning or as a free standing document. Could you comment?

* Should energy emergency planning be a mandatory activity?

ANSWER: Please see the responses to Questions 2 and 4 by Ms. Duckett.

QUESTION 5. The Committee hears a great deal regarding the linkages between energy efficiency and economic development. Can you discuss this linkage and suggest ways the legislation might help to strengthen this linkage?

ANSWER: The United States uses more than double the amount of energy as a percentage of GNP as the Japanese, with West Germany only slightly less energy efficient than Japan. The fact is that U.S. business must become more energy efficient in order to survive in the global marketplace. In addition, a substantial amount of our trade deficit is attributable to energy imports(approximately 28% in 1988, or $32.9 billion). This legislation would promote energy efficiency programs in the business sector and would, most importantly, allow innovative financing of energy projects that could be used by the business sector. For example, New York and Massachusetts established energy audit programs for businesses of all types. In the New York State program the audits were conducted mostly be retired engineers. Over 11,000 audits have been performed. New York then uses oil overcharge refunds to create a zero interest loan program for these businesses. The energy savings estimated by the energy office has been on the order of $50 million per year. Programs throughout the country instituted by energy offices focus on the link between energy efficiency and economic development.

QUESTION 7. What impact do you perceive the merger of the EES and the SECP will have on the two programs?

ANSWER: The impact will be minimal since almost all of the energy offices operate the programs together. The merger will also increase administrative efficiency. A technical amendment will be required to merge the present funding formula for each of the programs. The SECP funding formula includes an allocation based upon energy savings, while the EES formula does not include this provision. This is a problem that can be solved.

QUESTION 8. Do you believe that a State Energy Conservation Goal of a 10 percent reduction in energy use by 2000 is realistic?

Follow-up:

* In the state of Texas, what steps would be necessary to achieve a 10 percent reduction in energy use?

ANSWER: See the response to Question 3 directed to Ms. Tombari. With respect to Texas, we believe that by targeting energy efficiency in large institutional buildings, including capital retrofits we can make great progress. In addition, improving energy efficiency in new building construction should produce significant savings. The Texas Energy Management Center is working with architects to achieve this goal. We have also worked very closely with the industrial sector and that cooperation is producing, and will produce, more energy savings.

National Association for State
Community Services Programs

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May 30, 1989

Ms. Leslie Black
Professional Staff
Senate Committee on Energy
and Natural Resources
364 Senate Dirksen Office Building
Washington, D.C. 20510-6150

Dear Ms. Black:

Enclosed please find responses from Bill Concannon, Massachusetts, to the further questions posed by the Senate Subcommittee on Energy Regulation and Conservation.

If the National Association for State Community Services Programs can be of further assistance please do not hesitate to call.

Sincerely yours,

Marjorie J. Witherspoon
Executive Director

Enclosure

QUESTIONS FROM THE SENATE SUBCOMMITTEE
ON ENERGY REGULATION AND CONSERVATION
FOR WILLIAM L. CONCANNON
MASSACHUSETTS EXECUTIVE OFFICE OF COMMUNITIES AND DEVELOPMENT
AND RESPONSES

Question 1. DOE suggests the elimination of the 40 percent materials requirement under the Weatherization Program. Would you oppose its elimination, and if so why?

Follow-up: * DOE is concerned about the costs and delays involved in a case-by-case review of waivers. Do you see that as a legitimate concern and how could such a problem be solved?

Response To 1. While many states would certainly be able to handle such freedom, it is questionable that a complete elimination of the "materials installed requirement" without an acceptable performance-based substitute could be considered good public policy. NASCSP would be willing to work with USDOE to develop criteria to address both the need to maintain a certain performance standard and the legitimate concern about administrative delays to review each waiver on a case-by-case basis.

Question 2. How can improvements in efficiency be utilized to promote economic development in the states? Should state energy offices work with economic development agencies within the states to promote development through conservation?

Response To 2. Weatherization, as a construction management industry, has an estimated economic multiplier effect of three, which illustrates the inherent economic benefit of the program. Specific strategies for economic development could work well with the Weatherization Program. New technologies which are easily transferred to the private sector, development and manufacture of weatherization materials, and the subsequent creation of jobs in these areas could enhance the economic benefits of the program. However, any economic development strategy should be fully funded from non-weatherization sources so as not to restrict or inhibit the main purpose of the program.

Question 3. What do you see is the role for DOE in assisting with the evaluation of programs, if any? Should there be a common methodology for completing these evaluations throughout the states?

* Do you feel these evaluations could be used to reward states for successful programs?

* What system does Massachusetts currently employ for conducting evaluations of weatherization programs?

Response To 3. There must be consistent criteria for analyzing state weatherization effectiveness. The greatest value to continual evaluative studies comes from the data, which enables a state or USDOE to make intelligent policy decisions regarding the future direction of the program. Because of the natural differences of state weatherization programs and the climatic conditions endemic to their regions, it would be virtually impossible to create an effectiveness evaluation which could fairly incorporate the subtleties of those differences. Therefore, any national evaluation would become subjective and would not be desirable. NASCSP encourages the development by USDOE of statewide evaluations with consistent methodology, but would not support state rewards on the results.

Massachusetts currently uses fuel savings studies for conducting evaluations of priorities for energy saving measures in clients homes. The studies have been performed by an independent subcontractor. On site monitoring of client homes with a base line study and a follow-up study after installation of a measure is the specific system used. Such studies have allowed Massachusetts to implement a specific change in priority measures from one heating season to the next.

In addition Massachusetts performs detailed program assessments of subgrantee program operation, looking at every phase of the program operation on the local level including the technical aspects of the program as well as management, fiscal operations, procurement and coordination with local subcontractors.

Question 4. Many of the criticisms of the Weatherization Program have centered on the lack of sophistication of these programs and their use of unskilled labor. Could you comment on this? What are the job training benefits to be gained from these programs? Have private contractors learned from these programs?

Response To 4. The Weatherization program has built a professional, innovative delivery network over the last twelve years. Many states have incorporated state-of-the-art technology and approaches into the subgrantee provision of services. Weatherization, in these instances represents the cutting edge of residential conservation. State field representatives and technical trainers and subgrantee weatherization personnel are schooled in construction and energy conservation management techniques and many have included some of the following techniques into their state and local programs:

- o Infrared thermography;
- o Blower door instrumented audit technology;
- o Heating systems' diagnostics and repairs; and
- o Sophisticated protocol based fuel-use analyses to determine the most cost-effective level of investments in homes.

Question 5. How effective are weatherization programs in keeping the stock of affordable housing maintained for low-income tenants? Are these programs effective in reducing the decline of low-income housing stock?

Response To 5. Weatherization is an important part of the strategy to maintain low-income housing in this era of homelessness. Not only does a low-income client realize an increase in comfort and a decrease in fuel bills, but weatherization services also go to the heart of maintaining the integrity of older housing. Heating system upgrades, window repairs and replacement, and infiltration and other necessary repairs all increase the viable life of low-income housing. Strong landlord agreements maintain rental housing as low-income housing stock in some instances up to ten (10) years. Weatherization programs have a proven ability to leverage a non-eligible owner's resources and other public or private funds to enhance conservation services with other housing-related repairs.

WRITTEN RESPONSE OF FRED TUCKER, Executive Director
Little Dixie Community Action Agency, Inc.
Hugo, Oklahoma
May 23, 1989

Question 1: Please describe the types of homes most likely to fall under the weatherization program you currently administer.

What criteria is used to select these homes for weatherization?

How inefficient are these houses? How much energy is wasted, on average, from these homes prior to weatherization?

Do you run into homes that you cannot weatherize because they are too dilapidated? What measures are taken for such units to provide some minimum energy savings?

Answer 1: Most homes selected for weatherization under our program are older, poorly constructed frame houses. They are very drafty and open and in many instances they were never totally completed.

In selecting the houses to be weatherized, we apply a point system that is based upon the concept of doing the repairs that conserve the greatest amount of energy, e.g., stop infiltration, attic insulation, underpinning, etc.

The inefficiency of the home selected for weatherization can best be measured by a comparison of the heating and cooling cost before and after weatherization. On a limited basis, we believe that a savings in the 20 to 30 percent range can be obtained. This is a rough measure and does not take into consideration the human factor of comfort, health, etc.

In those instances where a house is too dilapidated to work on, an effort is made to find alternate housing for the family. This is usually accomplished by moving the family into some form of subsidized housing such as elderly, low-income, Section VIII, and Farmers Home Administration Section 504 Program.

Weatherization is a vital part of housing repair and rehabilitation, but it cannot do the entire job in the kind of dilapidated rural housing we serve. Some of our clients live in homes with no inner walls, or proper bathroom facilities.

We have one Housing Preservation Grant from Farmers' Home Administration which allows us to do comprehensive structural work and weatherization combined. For the 30 homes a year on which we spend an average of $9,600 from all sources, we can assure a safe, stabilized home for 10? 20? years to come. All

weatherization work really ought to be a part of a low-income housing preservation strategy, but the resources simply aren't there.

Question 2: The U.S. Department of Energy suggests that oil overcharge funds "provide ample resources" for state conservation programs.

* Do you agree?

* Do you see these oil overcharge funds as a long-term source of funding for state funding for state conservation programs?

Answer 2: We do not agree that there are ample resources. The weatherization program has had to compete with other interests to obtain a portion of the oil overcharge resources while the Department of Energy weatherization appropriations have diminished and now the oil overcharge funds are diminishing, which eliminates the potential for oil overcharge funds as a long-term source for funding weatherization programs and the overall result will be a reduction of resources for weatherization purposes.

The report of the National Consumer Law Center we made available for your Record is closer to the Department of Energy's testimony today than to figures previously offered by the Administration. Both agree that the funds are largely committed.

We rely on these quarterly reports the National Consumer Law Center prepares under contract to Department of Energy. Their surveys have always identified funding allocations made by legislative or executive decisions for long term funding. Until recently, Department of Energy reported only funds already legally obligated by a state agency. The newer Department of Energy reports are different. Unlike those used by OMB and the Reagan budget documents, they also identify funds allocated but unspent. The figures are getting closer; however, we have not seen details of their analysis no state-by-state breakdowns, so we cannot resolve for the moment the arithmetical differences.

In fact, let us assume the Administration's numbers for the moment. Say that something over $400 million is not yet obligated from oil overcharge funds. You may not be aware that the Administration has testified to the Labor Health and Human Services Subcommittee that from available overcharge funds:

> The $442 million LIHEAP cut from FY1987 levels, plus the proposed $238 million for FY1990, cut can be made up.

> Now we are to believe that in addition to the $52 million annual cut we had to make up in the state programs, some unspecified future cut, perhaps the entire $200 million, can be made up.
>
> Over $700 million per year would be necessary to hold these five programs alone at the pre-oil overcharge levels.

The National Consumer Law Center reports show little will be added to oil overcharge distributions annually not as the bulk of both cases has been distributed, and the rest flows over an eight year period, much of it to the U.S. Treasury and not the states.

In addition, there are many allowable uses for these funds. States gave about half the Exxon settlement for low-income uses and 28 percent of Stripper Well. These are creditable figures and show the importance that states attach to our programs. But the fact is, the money is largely gone.

Question 3: Department of Energy suggests elimination of the 40 percent materials requirement under the weatherization program. Would you oppose its elimination, and if so, why?

Answer 3: The original intent of the requirement which was proposed by the Senate Aging Committee, was to guarantee quality permanent investment for the client. It was probably an appropriate reflection of the state of the weatherization art at the time, in which insulation and storm windows were the most effective measures.

We feel there should be an alternative way to assure that the taxpayer dollar is being used in a cost-effective manner. The Department's proposal provides for neither accountability nor minimum standards of effectiveness. We feel Congress and the public still have a right to know how weatherization decisions are made. For states which drop the simple standard, a new method of decision making, e.g., the new energy audit, which includes certain minimum elements, creates the test for expenditure of public funds. The bill provides for both flexibility and accountability and should not be changed.

Department of Energy has helped develop new audit techniques. Most audit proposals from states will be variations on these models or RCS program audits. States must be required to submit field test and technical data with their applications which Department of Energy or its contractors or the labs can review for completeness, but which cannot be repeated. Not all states will apply, of course.

We do not oppose the elimination of the 40 percent requirement. The question also states that Department of Energy is concerned about the costs and delay in reviewing/negotiating the average material ratio during the plan approval process. Depending upon Department of Energy's review/approval procedures, such delays are very possible. We have three suggestions:

1. That only those states requesting an average material percentage of less than 40 percent be required to negotiate with the Department of Energy.

2. That the Department of Energy Support Offices be given the authority to negotiate and approve material averages of less than 40 percent. The Support Offices are the most knowledgeable of regional economic conditions and weatherization needs.

3. That Department of Energy be required to approve or set a specified materials average within a specified time, otherwise the (State) proposed average is automatically approved.

Question 4: Under Department of Energy rules, no measures related to cooling efficiency are allowable. Can you please give us some examples of the cooling measures you would like to see authorized under the program? Please describe the Oklahoma field tests of cooling measures funded under Department of Energy.

Answer 4: Question 4 asks for examples of cooling measures we would like to see authorized:

Window air conditioning retrofits and replacement with high efficiency unit(s)

Radiant barriers

Ceramic Insulating Coating

Question 4 also asks for a description of the Oklahoma field test of cooling measures funded under the Department of Energy:

The field test will evaluate the effectiveness of installing conservation measures to reduce electric cooling costs in low-income homes.

This project will determine the energy savings and benefit-to-cost of three technical approaches to improve residential cooling efficiency. It will first examine the effectiveness of using the combination of measures currently installed by the Oklahoma Weatherization Assistance Program. These include measures to reduce air infiltration, attic insulation, and storm windows. Then, in combination with these measures, the project

will test the value of adding an attic radiant barrier, or replacing existing window air conditioner(s) with high efficiency unit(s).

The project will provide state, utility, and local managers with detailed analysis about which weatherization measures are most effective in reducing residential cooling costs. It will provide technical researchers with more information about how homes operate in hot and humid climates and aid in the development of better energy audits that are based on measured energy use in actual homes.

We recommend to you that the Department of Energy be ordered to put on its list of allowable measures the best available technologies for guaranteeing health, safety, and energy savings in warm weather, and to keep that list updated as the test results and other technologies are reviewed. Cooling systems where they exist will nearly always mean window air conditions or ceiling fans, and should be treated the same as heating systems are treated in the program and replacement allowed. Ventilation measures should be encouraged.

However, Congress' role should be to require Department of Energy action and allow the experts and the states to decide what can work in this fast-changing field.

Question 5: Could you briefly describe the nature of the client education necessary to maximize the benefits to low-income families of weatherization materials installed.

> Are follow-up visits necessary to ensure proper maintenance of weatherization equipment?
>
> What is the average lifetime and payback period of this weatherization equipment?

Consumer education is extremely important and clearly can save energy. Proper use of a weatherized building and its heating or cooling systems can mean far greater energy efficiencies than uninformed use of the building.

We regret that the limited weatherization resources we have in our own program does not permit us to undertake as extensive education efforts as we would like. However, our crews do spend time with our clients upon completion of the job, to show them how to protect the materials installed and extend their life. In addition, they discuss techniques for getting the best use of heating or ventilation and of major appliances.

In discussion with my counterparts around the United States, I find that the most extensive consumer education programs occur where the local utility acts in partnership with the

weatherization subgrantees. I would like to submit for your records one excellent model program, this one a joint venture of Wisconsin Electric Power and CAP Services of Stevens Point, Wisconsin. In addition, the Department of Energy has compiled materials that are very helpful.

CAP SERVICES, INC.
ARREARAGE REDUCTION PROJECT

In 1985, CAP Services approached Wisconsin Gas with a proposal for a project targeted to low income customers in arrearage. The project was designed to give these households better control over their energy usage and an incentive to make maximum use of this control. CAP felt that through conservation many households could eliminate future arrearages by reducing unnecessary consumption. The strategy proposed included a better targeting of the ongoing weatherization programs offered by both CAP and WI Gas, the addition of a consumer education curriculum, and an arrearage credit component which rewarded conservation efforts by reducing arrearages.

After a series of meetings, CAP and WI Gas entered into an agreement to initiate a pilot project to test the feasibility of reducing past and future arrearages of Wisconsin Gas customers by first, reducing consumption, and then providing several options for earning "credits" which could be applied against past arrearages. Credits could be earned by either: keeping current on monthly bills (payment method); reducing consumption compared to the previous year's usage adjusted for weather (conservation method); or a combination of both (deluxe model).

After input from the Public Service Commission, a second test was included to determine if the energy savings achieved by weatherization programs could be improved by simply adding a consumer education component and if so, by how much.

Eight test groups were established. They included:

1. No assistance: Client responsible for eliminating arrearage.
2. Weatherization only: Client responsible for eliminating arrearage.
3. Weatherization and Energy Conservation Counseling: Client responsible for eliminating arrearage.
4. Weatherization and Payment Credits: One thirty-sixth of arrearage forgiven for each month the participant pays his or her current bill.
5. Weatherization and Conservation Credits: Arrearage reduced by the cost of each therm saved on a weather-adjusted basis.
6. Weatherization, Counseling and Payment Credit.
7. Weatherization, Counseling and Conservation Credit.
8. Weatherization, Life Style Counseling, Payment and Conservation Credits (Deluxe method).

All participants were required to be low income and at least two months in arrearage at the time of enrollment. Early in the negotiations, it was decided that participants themselves would choose the method they wanted to use to reduce their

arrearage to encourage participation. There were two exceptions.

One was that the "deluxe" option was be limited to participants whose gas service was shut-off at the time of their enrollment but who would be reconnected if they agreed to participate. The second was to limit conservation credits to those Wisconsin Gas offices which did monthly meter readings (Wautoma and Wisconsin Rapids). CAP felt monthly feedback to clients on the savings achieved as a result of conservation efforts was essential to successful implementation of the life style counseling.

For participants selecting a payment or conservation credit option, all collection efforts by the utility ceased upon enrollment and their arrearage was placed into "holding". Participants were informed, however, that collection efforts would renew if they were dropped from the program or if their bills during or after enrollment were not kept current.

Due to delays in receiving WI Gas corporate and Public Service Commission approval, the project was not implemented as early as originally projected. On August 1st, 1985, referrals began being accepted from WI Gas and the project was implemented.

The project has since been refunded for a second year, (7/1/86-6/30/87) and a third (7/1/87-6/30/88). Based on the first year's experience, the number of options offered participants has been reduced to four. Efforts are now being made to expand the project into additional areas of the state.

Below are some of the initial results of the project.

1. 57% of the participants enrolled had never had their dwelling unit weatherized by either CAP or WI Gas.

2. The 211 participants enrolled the first two years were $83,537 in arrearage when enrolled (an average of $396/household).

3. $28,564 in arrearage has already been eliminated through a combination of cash payments and credits. 46% of Year I and 16% of Year II participants have eliminated their total arrearages.

4. Only 6% of all participants have failed the program.

5. Participants enrolled in counseling in combination with any other option reduced their energy usage 9.8% more than participants not receiving counseling.

Attached is an interim report on the project covering the period 8/1/85 through 11/30/87.

ARREARAGE REDUCTION PROJECT
July 1, 1987 through June 30, 1988
Interim Report: January 9, 1988

INTRODUCTION

CAP Services' Arrearage Reduction Project is funded by the Wisconsin Gas Company. It began in 1985 to provide budget and energy counseling to low-income families in six counties in central Wisconsin. The Project is staffed with one energy resource manager and a part-time data clerk.

The Project assists participating families in reducing home energy consumption and in eliminating arrearages on past heating bills. Two strategies are used to reduce consumption. One is intensive in-home energy conservation counseling based on the family's energy use patterns and the other is weatherization and structural retrofit.

Energy conservation data measures each participant's energy use prior to enrollment in the Project and compares it to their current usage. Adjustments are made for the number of degree days and current gas rates.

Arrearage reduction is addressed through enrollment in a special budget plan and then offering two methods of earning credits against arrearages. Payment credits are based on a fixed payment amount (one-thirty-sixth of arrearage) being forgiven each month payment is made. Conservation credits are based on the dollar value of energy savings achieved. Some families are eligible for both credit options.

To date, 290 participants have been enrolled (90 in Year I, 121 in Year II, and 79 in Year III). Sixty have totally eliminated their past-due amounts.

YEAR I PARTICIPANTS PROJECT-TO-DATE ACCOMPLISHMENTS

STATUS IN THE PROJECT:

- 90 participants were enrolled in Year I
- 62 (69%) were referred and received weatherization
- 41 (46%) completely eliminated their arrearage
- 12 (13%) moved from the Wisconsin Gas Service Area
- 6 (7%) failed the program.
- $35,208 of arrearages were frozen upon enrollment

ARREARAGE REDUCTION: Year I participants reduced their frozen arrearages by an average of 44.8% Credits were given for conservation and LIBP totaling $12,806. With an additional $2974 paid in cash, Year I participants eliminated a total of $15,780 of arrearages. This amount does not include the monthly budget payments for families using the LIBP.

ENERGY CONSERVATION: Participants in the counseling components of the Project saved an average of 7.3% more energy than those who did not receive counseling.

YEAR II PARTICIPANTS PROJECT-TO-DATE ACCOMPLISHMENTS

STATUS IN THE PROJECT:

- 121 participants were enrolled
- 59 (31%) were referred to weatherization
- 19 (16%) have completely eliminated their arrearages
- 25 (21%) people moved from the Wisconsin Gas Service Area
- 13 (52%) of those who moved made arrangements through the Project to pay off their arrearages
- 6 (5%) people failed the program.
- $48,379 of arrearages were frozen upon enrollment

ARREARAGE REDUCTION: Total arrearage reduction for Year II participants is $12,784, with $9833 as credits and $2951 as cash. Participants reduced their arrearages an average of almost 26%.

ENERGY CONSERVATION: Participants in the counseling component saved an average of 11.58% more energy than those who did not receive counseling. Following weatherization, Year II participants who received intensive counseling saved an average of 8 times the energy of those who did not receive counseling.

YEAR III PARTICIPANTS ACCOMPLISHMENTS - Data not yet available

FUTURE CONSIDERATIONS FOR THE PROJECT

The need exists to continually assess staffing levels and activities. Many factors contribute to seasonal demands on staff time. These include the substantial number of referrals occuring at the onset of the heating season and again during the spring. The need for re-enrollment and adjustment of budget payments also occurs in the early winter when energy assistance aid is distributed. Activities bottleneck at a time when energy conservation counseling is most effective but less time is available to address those needs intensively.

An additional factor effecting staffing levels is time required for monitoring and follow-up activities. The number of participants who require re-servicing of their budget plan or additional conservation counseling grows exponentially. Customers may participate as long as three years.

A variety of patterns are emerging based on the the time spent within each component. The amount of time required to serve a participant in the LIBP Only option is less than one who also receives counseling. At the same time, renewal of the LIBP in

subsequent years requires less time than when the participant was originally enrolled. A participant who elects to receive conservation credits similarly requires more time than one who who does not. Many factors including the number of times a participant requires additional budget or energy counseling within a year can have an impact on the overall costs of the Project. Management is in the process of assessing the comparative costs of each component for the future.

As part of the Arrearage Reduction Project, family members track their daily energy consumption habits on a poster at home.

An energy-use chart on a refrigerator door. Conservation goals. Kids and parents. A counseling program sponsored by Wisconsin Gas has put them all together and made saving energy

A family affair

"I'm learning a lot about how to save energy and money at home. This will help me when I grow up."

Mike, 12, is not the only one in his household who is learning to save energy and money. His 14-year-old brother and his mother also are involved.

Mike's family is one of 90 in Adams, Outagamie, Waupaca, Waushara, and Wood counties participating in the Arrearage Reduction Project, an experimental program funded by Wisconsin Gas.

The Arrearage Reduction Project was developed about a year ago by Wisconsin Gas and CAP Services, a Community Action agency based in Stevens Point. The project helps low-income district customers who are at least two months behind in paying their gas bills reduce their debts and become regular payers.

"The program is the most fantastic thing that could have happened to us," says Mike's mother, Judy. A single parent, she lost her full-time job while recovering from surgery. Without any income, the unpaid gas bills mounted.

"If it weren't for the arrearage project, my gas service probably would've been disconnected. It gave me a real break when I needed it to catch up and showed me how to avoid getting behind again."

Program participants are placed on a long-term budget payment plan geared to their incomes and gas usage.

The families also receive basic energy conservation counseling to help decrease their current energy consumption. Later, CAP Services weatherizes the houses and apartments to further cut energy waste.

Past-due bills reduced

The participating families can reduce or eliminate their past-due gas bills one of two ways. Through "payment credits," the company forgives one-third of the past-due amount for every 12 months they continue making payments according to their budget plans. With "conservation credits," one dollar is deducted from the participants' heating arrears for every dollar conserved in heating costs.

The one aspect of the project that sets it apart from other conservation programs is the emphasis on energy counseling. Dave Lovejoy, CAP Services energy resource manager, counsels arrearage project families in their homes. The entire family gets involved, particularly children, and the results in energy savings have been dramatic.

"Dave gave us conservation literature and basic tips on how to save energy and reduce our heating bills using a team approach," said Judy. Instead of applying this information on a do-it-yourself basis, Judy chose to have Lovejoy develop a specific conservation plan for her household and counsel her family at home regularly. Forty-nine other families in the arrearage project also chose this ongoing counseling option. It usually entails five to 10 one-hour meetings every one to three weeks.

"During counseling," Lovejoy says, "I describe some quick, easy and inexpensive measures to reduce energy consumption by about 10% to 20%." They include: turning the thermostat down at night and during the day; turning the water heater down or off when no one is home; sealing air leaks in walls, doors and windows; and closing off unused rooms.

Significant savings

Program participants are enthusiastically applying these basic conservation steps and saving an average of 15% on their monthly bills during the heating season, Lovejoy said. Some participants are saving as much as 26%. He noted that these figures may drop due to changes in weather conditions and some conservation practices, but significant energy savings are still possible in the long run.

Judy has saved an average of 12% a month. She opted to receive the conservation credits to help reduce the $243 she owed. After being in the program six months, she cut her past-due amount by about $100.

On the average, families are expected to reduce their arrears more than 33% during the first 12 months of the project, with some totally eliminating them within the first six months. The conservation credits are proving far more effective than the payment credits in reducing arrearages for most of the customers, Lovejoy said.

"The Arrearage Reduction Project is demonstrating that families can achieve major savings even before any weatherization work is done," Lovejoy said.

He credits kids for being a key to the project's success. "Children, especially those in their preteens, surprisingly are very receptive to the energy counseling. Teenagers usually are tougher to involve, but their participation is especially important because of the influence they can have on the younger kids."

Additional efforts

Judy's sons both took their energy conservation goals very seriously. "My brother and I don't open the refrigerator door as often or for as long; we shut off lights and close the outside doors," says Mike.

"The boys also insulated their bedroom windows and use less hot water," Judy says. "I didn't believe they could be so energy conscious."

The program's benefits also extend beyond the home. "The things we learn through our energy counseling are helping my brother and me with our energy studies in school and with earning energy conservation merit badges in Boy Scouts," says Mike.

Getting kids involved in the arrearage project increases the involvement of parents. The family members list their individual conservation goals and log their daily consumption habits on an "Energy Notes" poster on the refrigerator door. The kids earn food coupons from McDonald's and Hardee's restaurants, and CAP "Energy Saver" t-shirts as rewards for progress.

"It's just great!" says Judy. "We have family conferences where we discuss our progress and make challenges to save so much a month. It's drawn us all closer together."

"The arrearage project helps people help themselves," Lovejoy says. "It's a real pride builder for participants of all ages." He noted that the project helps relieve families of financial and emotional pressures by giving them the confidence and ability to improve their situation.

"I hated to see my gas bills pile up, but I didn't want to pay pennies when I owed dollars," Judy said. "And I wouldn't beg my friends or family for help. I wanted to get myself out of this on my own."

Project participants say they have been astonished by the savings they have achieved, Lovejoy said. "Many of them now actually look forward to getting their bills to see what they've saved whereas before some wouldn't even open them."

"I feel wonderful about what we've done so far through the program," says Judy. "I know I'm not out of the woods yet, but I can walk down the street and say, 'Hey, I'm doing the best I can.' "

Lovejoy emphasized that Wisconsin Gas has been

"Energy Saver" t-shirts and free food coupons for McDonald's and Hardee's restaurants are used to reward kids for conserving.

the major supporter of the project, providing funds, referrals, conservation literature, budget billing and assistance with monitoring participants' monthly bills and energy consumption.

"As far as we know," Lovejoy said, "there is no other program in the country that is using in-home energy counseling, weatherization and arrearage reduction credits to resolve this problem."

Kurt Koepp, Wisconsin Gas district coordinator-weatherization programs, said the company plans to extend the program another year.

"We'll analyze which combination of the project's main components—the do-it-yourself energy conservation, ongoing conservation counseling, credit incentives and weatherization—works best and then gradually extend that combination districtwide. The company may adapt some aspects of the project for its Milwaukee-area programs as well."

"With weatherization of the homes in progress," Lovejoy says, "company customers like Judy and her family look forward to even lower fuel costs next winter and to better control over their energy bills in the future."

APPENDIX II

Additional Material Submitted for the Record

The ALLIANCE To Save Energy

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Lloyd N. Cutler
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Fred L. Hartley
Chairman and CEO
Arthur J. Hill
Chairman and CEO
George H. Lawrence
President
William McCollam, Jr.
President
Richard L. McGraw
Vice President
David O. Maxwell
Chairman and CEO
Fannie Mae
Vita Ostrander
Past President
Russell W. Peterson
President Emeritus
Kenneth Rush
Former Cabinet Member and Ambassador
Elvin J. Slade, Jr.
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Russell E. Train
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World Wildlife Fund, The Conservation
Foundation
Barbara Vucanovich
Chairman, Energy Conservation Committee
National Association of Regulatory Utility
Commissioners
Elmer Winter
Past President
Manpower Inc.
James L. Wolf
Executive Director

THE OKLAHOMA COOLING RETROFIT FIELD TEST:

Evaluating Technologies to Reduce Cooling Costs in Low-Income Homes

Conducted By:

Public Service Company of Oklahoma

Oklahoma Department of Commerce
Division of Community Affairs and Development

Wa-Ro-Ma Tri-County Community Action Foundation

Supported By:

U.S. Department of Energy:

Office of Buildings and Community Systems
Building Retrofit Program

Office of State and Local Assistance Programs
Weatherization Assistance Program

Alliance to Save Energy

Oak Ridge National Laboratory

November 1987

OKLAHOMA COOLING RETROFIT FIELD TEST
EXECUTIVE SUMMARY

The field test will evaluate the effectiveness of installing conservation measures to reduce electric cooling costs in low-income homes.

This project will determine the energy savings and benefit-to-cost of three technical approaches to improve residential cooling efficiency. It will first examine the effectiveness of using the combination of measures currently installed by the Oklahoma Weatherization Assistance Program. These include measures to reduce air infiltration, attic insulation, and storm windows. Then, in combination with these measures, the project will test the value of adding an attic radiant barrier, or replacing existing window air conditioner(s) with a high efficiency unit(s).

The project will provide state, utility, and local managers with detailed analysis about which weatherization measures are most effective in reducing residential cooling costs. It will provide technical researchers with more information about how homes operate in hot and humid climates and aid in the development of better energy audits that are based on measured energy use in actual homes.

To determine the effectiveness of the retrofit measures, the project will install measures in randomly selected low-income homes and analyze each home's pre- and post-retrofit energy consumption. One hundred and twenty homes will be divided into three treatment groups and a control group. Energy use will be monitored weekly by reading each home's electric and gas meters and separate submeters installed on air conditioning systems. In addition, indoor air temperature and weather data will be monitored. Data will be collected over a two year period that includes a full cooling season both before and after the retrofit. Upon completion of this field test, a final report will be written and the results disseminated to state, community, and utility weatherization managers.

This Oklahoma Field Test is a cooperative project involving six organizations:

(1) U.S. Department of Energy,
(2) Public Service Company of Oklahoma,
(3) Alliance to Save Energy,
(4) Oak Ridge National Laboratory,
(5) Oklahoma Department of Commerce, and
(6) Wa-Ro-Ma Tri-county Community Action Foundation.

THE NEED FOR BETTER COOLING RETROFIT

Weatherization programs in hot and humid climates are not as effective as possible because managers lack information about the performance of conservation measures to reduce cooling costs.

Up to half of an Oklahoma family's energy costs occur during the cooling season. Oklahoma's Weatherization Assistance Program, like almost all southern programs, installs measures primarily intended to reduce heating costs - air infiltration reduction, attic insulation, and storm windows. While these measures may reduce cooling costs as well as heating costs, installing other conservation measures specifically designed to reduce cooling costs could increase the program's energy savings and cost-effectiveness.

The field test will help the Oklahoma Weatherization Assistance Program determine which cooling measures should be included in their program. U.S. Department of Energy research indicates that several cooling measures may be cost effective to install in southern weatherization programs. However, two of the most promising measures - radiant barriers and replacement air conditioners - need to be tested under field conditions.

The field test will help Public Service Company of Oklahoma (PSO) to accurately inform their customers about the best ways to reduce cooling costs. PSO's residential customers have not saved as much energy as expected from recommended conservation measures and have been slow to upgrade to high efficiency appliances. The field test will provide PSO with the experience and information needed to better predict energy savings and encourage the adoption of appliance upgrades.

The results of the field test will be used by researchers to design a new residential audit for southern climates. Also, field test data will be placed in a national data bank to help the research community better understand the performance of buildings.

FIELD TEST TECHNICAL APPROACH

The field test will retrofit randomly selected low-income homes using three different conservation packages. Energy use will be measured before and after installation, to determine the benefit-to-cost of each approach.

TREATMENT GROUPS

The field test will include 120 randomly selected low-income homes divided into four equal groups:

Group #1 -- Weatherization

Weatherization measures currently used in the Oklahoma Weatherization Assistance Program -- infiltration reduction, attic insulation, and storm windows -- will be installed in the weatherization group of homes.

Group #2 -- Radiant Barrier

In addition to the measures installed in the weatherization group, these homes will be retrofitted with a radiant barrier (a type of reflective foil) applied horizontally above the attic insulation.

Group #3 -- Air Conditioner

These homes will have existing room air conditioners replaced by new high efficiency units of similar capacity, in addition to receiving the measures installed in the weatherization group.

Group #4 -- Control

No conservation measures will be installed in the control homes during the test period. The group will be used as a standard for comparison to account for the effects of factors, such as price-induced conservation, that could bias the results. Control group homes will be weatherized at the conclusion of the field test.

HOUSE SELECTION CRITERIA

The field test homes will be 1) single family, owner occupied (no mobile homes), 2) eligible for the Oklahoma Weatherization Assistance Program, 3) in PSO's customer territory, and 4) cooled by one or two room air conditioners. Prospective households will be screened to determine if they meet these minimum selection criteria and

other conditions designed to minimize variances between the groups and loss of homes during the course of the study.

PROJECT TRAINING

Training workshops will be conducted to assist the organizations involved in the project. Workshops will cover radiant barrier installation and blower door use.

PROJECT TIMEFRAME

The field test will be conducted from spring 1988 through fall of 1989. Pre-retrofit energy use will be monitored during the summer of 1988. Retrofits will be installed between the fall of 1988 and the spring of 1989. Post-retrofit energy use will be monitored during the summer of 1989.

DATA COLLECTION

Energy use, indoor air and temperature, and local weather information will be collected on a regular basis. Total household electric and gas use will be read weekly from each home's existing master meters. Air conditioner(s) will be submetered and readings will be made weekly. A small temperature sensing cube will be installed in each home to record indoor air temperatures at 15 minute intervals; it will be read monthly. In up to five homes, small weather stations will be installed and data will be collected weekly. All data will be forwarded to Oak Ridge on a monthly basis.

ANALYSIS AND REPORTS

Two technical reports will be published -- an interim report after the completion of the pre-retrofit summer and a final report at the end of the field test. Based on the technical results, a summary briefing paper will be developed and disseminated to state, community, and utility weatherization program managers.

COOLING RETROFIT MEASURES

The cooling efficiency performance of a basic package of weatherization measures -- infiltration reduction, attic insulation, and storm windows -- and two cooling retrofit measures -- attic radiant barriers and high efficiency room air conditioners -- will be evaluated.

BASIC PACKAGE OF WEATHERIZATION MEASURES

The Oklahoma Weatherization Assistance Program typically installs a standard set of weatherization measures in each low-income home serviced by the program. Although normally thought of as measures to reduce heating energy consumption, they may also have the side benefit of reducing cooling costs. These measures include:

Infiltration Reduction

Installing measures to reduce air infiltration is an important part of the Oklahoma program. For this field test, a blower door will be used to locate and fix major bypass areas. The blower door will provide data on the pre- and post-retrofit levels of air infiltration in each home. Weatherization crews will use this information to determine the optimal amount of materials and labor to invest in infiltration reduction measures.

Attic Insulation

The Oklahoma program currently increases each home's attic insulation level to a R-19; this procedure will be used in homes in the three retrofit study groups. Attics will be properly vented and minor roof leaks repaired. No other insulation measures will be employed.

Storm Windows

Storm windows are currently a major program measure and will be used in the study groups. Existing storm windows will be repaired if possible. Combination storm and screen windows will be installed on all windows where no storm exists, or where the existing storm is beyond repair.

NEW COOLING RETROFIT MEASURES

Both radiant barriers and high efficiency room air conditioners are designed to reduce cooling costs and have shown good results in laboratory and small-scale tests. This project will be the first large-scale field test of these options in a low-income weatherization program.

Attic Radiant Barriers

A reflective film, commonly known as a radiant barrier, will be installed horizontally across the R-19 insulation in the attics of group #2. The film is like a layer of aluminum foil which reduces the effects of solar gain in the summer by reflecting radiant heat away from the attic insulation. The barrier also reflects escaping heat back into the home in the winter. Laboratory studies have shown installing a radiant barrier can reduce a home's cooling load by up to 15 percent. Perforated radiant barriers will be used to allow any moisture escaping from the house and passing through the insulation, to also pass through the barrier and be carried out through the attic vents.

High Efficiency Room Air Conditioner(s)

In group #3, existing room air conditioners will be replaced with new high efficiency units of equal capacity. The new units will be selected based on their Energy Efficiency Ratio (EER)*. The following is a chart of the minimum EER for the replacements based upon capacity:

Capacity (BTU)	Minimum EER
< 6,000 BTU	8.0 EER
6 - 7,999 BTU	8.5 EER
8 - 13,999 BTU	9.0 EER
14 - 19,999 BTU	8.8 EER
>= 20,000 BTU	8.2 EER

*EER is calculated by dividing the cooling capacity in BTU's per hour (BTUH) by the power input in watts. This analysis is expressed in BTUH per watt (BTUH/watt). The higher the EER number, the more efficient is the air conditioner. The range of the existing units is expected to be between 5 EER and 7 EER.

THE ROLE OF EACH PARTICIPATING ORGANIZATION

The field test is supported by a team of federal, state, and local organizations interested in improving the performance of weatherization programs in Oklahoma.

The following are the field test responsibilities of each of the participating organizations:

U.S. DEPARTMENT OF ENERGY (DOE)

The U.S. Department of Energy is the federal department responsible for promoting energy efficiency research. Two offices at the U.S. Department of Energy provide support to the project. The Office of Buildings and Community Systems (BCS) provides funds to support the Alliance and ORNL research staff through the Building Retrofit Program. The Office of State and Local Assistance Programs provides the State of Oklahoma with funds to weatherize field test homes through the Weatherization Assistance Program.

ALLIANCE TO SAVE ENERGY (Alliance)

The Alliance to Save Energy is a non-profit coalition of business, government, and consumer leaders dedicated to increasing the efficiency of energy use. The Alliance has developed this project plan based on the contributions and comments of field test participants. Future responsibilities include trouble shooting problems, conducting field test training for energy auditors and weatherization installers, and disseminating field test results. In addition, the Alliance will draft recommendations for residential conservation programs based upon the field test results.

PUBLIC SERVICE COMPANY OF OKLAHOMA (PSO)

Public Service Company of Oklahoma is a major electric utility in state. PSO will review project documents and provide technical comments as needed. PSO will support the cost of submetering each home and provide an instrumentation specialist to work on the project. ORNL and PSO will jointly fund the salary and expenses of the instrumentation specialist. The instrumentation specialist will work with researchers at ORNL to maintain equipment and collect indoor temperature and weather data.

OAK RIDGE NATIONAL LABORATORY (ORNL)

Oak Ridge National Laboratory is the lead federal research organization on single family retrofit technologies. ORNL will draft a detailed experimental plan for the field test based on this project plan. ORNL will supply indoor temperature cubes and weather instruments and train the local instrumentation specialist in installation and use of the equipment. ORNL will check the quality of the field data, suggest how to correct errors, analyze data, and prepare interim and final technical reports.

OKLAHOMA DEPARTMENT OF COMMERCE (ODC)

The Oklahoma Department of Commerce manages the state's low-income weatherization program. ODC will manage the field test at the state level, coordinating the involvement of PSO and the local weatherization program provider, Wa-Ro-Ma Tri-County Community Action Foundation. The state will also provide the funds necessary to identify households, conduct audits, install retrofit measures and repairs, collect metered and submetered data, and remove the monitoring instruments at the conclusion of the study.

WA-RO-MA TRI-COUNTY COMMUNITY ACTION FOUNDATION (WA-RO-MA)

Wa-Ro-Ma Tri-County Community Action Foundation is the local weatherization provider in part of greater Tulsa. Wa-Ro-Ma will identify low-income homes that meet the field test criteria and interview each household. Wa-Ro-Ma will assess each homes, install basic conservation measures, radiant barriers, and air conditioners and make minor repairs. Some work, such as electrical work, will be contracted out to a private firm. Wa-Ro-Ma staff will read each home's electric, gas, and air conditioner meters weekly and forward the data to ORNL.

FIELD TEST TASKS

The field test is divided into ten tasks; each is the responsibility of one or more participating organizations.

PROJECT PLAN (Alliance; assisted by ORNL, with input from each participating organization)

The Alliance has prepared this project plan for the field test. The plan describes the project, need, approach, measures, role of each organization, task plan, time-line, and budget. The first draft of the plan was reviewed by the other participating organizations in July 1987. This final version of the plan is based on comments made during the review period.

EXPERIMENTAL PLAN (ORNL; assisted by the Alliance and PSO)

ORNL will develop an experimental plan based on the agreements outlined in this project plan. The experimental plan will provide detailed instructions about how the field test will be conducted and analyzed. The plan will be completed by January 1, 1988.

HOUSEHOLD SELECTION (Wa-Ro-Ma; assisted by the Dept. of Commerce, ORNL, and the Alliance)

Wa-Ro-Ma will identify 120 study homes eligible for the Weatherization Assistance Program. Wa-Ro-Ma will interview these households to determine if they meet other field test criteria and are willing to participate in the field test. This work must be completed by March 1, 1988. The experimental plan will outline household selection criteria and a method to assign homes to each of the four field test groups.

MONITORING INSTALLATION (PSO and Wa-Ro-Ma; assisted by ORNL)

PSO will fund Wa-Ro-Ma to contract with electricians to submeter air conditioners in each house (ORNL will provide necessary technical assistance). ORNL will provide 120 indoor temperature cubes and up to five small weather stations. All monitoring equipment will be installed by May 1, 1988 and removed by October 30, 1989. Funds for monitoring equipment removal will be provided by the Oklahoma Department of Commerce.

PROJECT TRAINING (Alliance; assisted by ORNL and subcontractors)

The Alliance will arrange technical training workshops for energy auditors and weatherization crews on using blower doors and installing radiant barriers.

AUDITING (Wa-Ro-Ma; assisted by ORNL, and the Alliance)

Wa-Ro-Ma weatherization staff will audit all 120 homes and conduct interviews of homeowners in the spring of 1988. At the conclusion of the field test, in the fall of 1989, auditors will interview each household again to identify any lifestyle or equipment changes that occurred during the test period. The experimental plan will provide interview forms.

INSTALLATION OF MEASURES (Wa-Ro-Ma)

Wa-Ro-Ma weatherization crews will install blower door guided infiltration reduction measures, attic insulation, and storm windows in homes in treatment groups #1, #2, and #3. In addition, they will install radiant barriers in group #2 and high efficiency room air conditioners in group #3. Measures will be installed between the fall of 1988 and the spring of 1989. Wa-Ro-Ma will also weatherize the control homes at the end of the field test.

DATA COLLECTION (Instrumentation specialist and Wa-Ro-Ma)

Data will be collected from the spring of 1988 through the fall of 1989. Wa-Ro-Ma data collection staff will visit each house on a weekly basis to read household gas and electric master meters and submeters. The instrumentation specialist will collect indoor temperature data monthly and weather station data weekly. All data will be forwarded to ORNL each month.

FIELD TEST ANALYSIS (ORNL; with review and comment by all participating organizations)

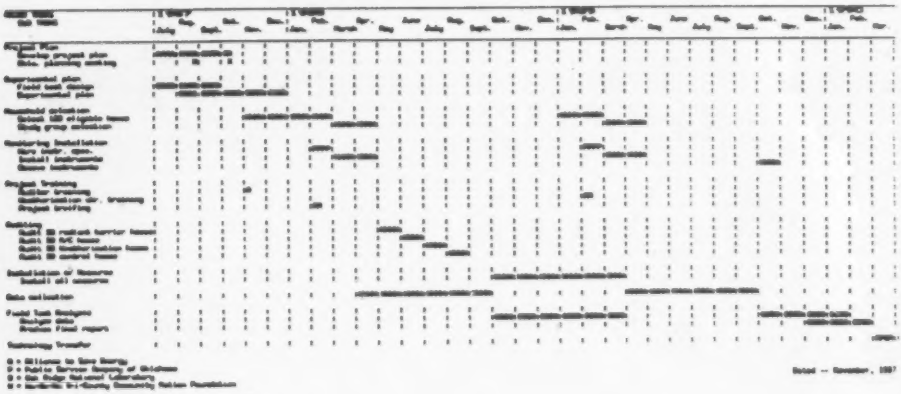
ORNL will analyze the before and after retrofit energy use, correcting for differences in indoor temperature and weather, to determine the energy reduction and cost effectiveness of measures. Data from control group of homes will be used to adjust the results in the other groups. ORNL will prepare an interim report by June 1989 and final technical report by March 1990.

TECHNOLOGY TRANSFER (Alliance, ORNL; assisted by PSO and the Oklahoma Department of Commerce)

The Alliance will prepare a brief on project results and implications, and disseminate it to weatherization program managers nationwide. Results will also be reported at weatherization and utility conferences. The results will be used to develop a new energy audit for southern state and utility weatherization programs.

FIELD TEST TIMELINE

The field test will be conducted over a two year period. Pre-retrofit data will be collected during the summer of 1988, retrofits will be installed between the summer of 1988 and 1989, and post-retrofit data will be collected during the summer of 1989. Performance analysis will be completed by March, 1990.



FIELD TEST BUDGET

The U.S. Department of Energy funds the Alliance and Oak Ridge, the Oklahoma Department of Commerce funds the costs of retrofitting test homes, and Public Service Company of Oklahoma funds field test instrumentation costs.

TASKS	ALLIANCE*	ORNL*	ODOC**	PSO***
Planning	$15,000			
Experimental Plan		$50,000		
Household Selection			$6,000	
Instrumentation				
Electric submeters				$10,000
Submeter installation				$15,000
Temperature meters		$30,000		
Weather stations		$20,000		
Instrumentation specialist		$20,000		$20,000
Instrument removal			$10,000	
Project Training	$10,000			
Auditing				
Staff			$8,000	
Equipment			$4,000	
Retrofit Costs				
Measures			$135,000	
Repair			$27,000	
Data Collection			$20,000	
Analysis		$105,000		
Technology Transfer	$10,000	$15,000		

Alliance----------$35,000
ORNL----------$240,000
State WAP----------$210,000
PSO----------$45,000

Total Field Test Budget - $530,000

* Alliance and ORNL work is funded by DOE.
** The DOE Weatherization Assistance Program provides these funds to the Oklahoma Department of Commerce.
*** PSO contribution is a combination of in-kind services and direct financial support.

National Association of
State Energy Officials

NATIONAL ENERGY POLICY STATEMENT

An optimal, integrated and least cost national energy policy should balance the goals of energy resource development, economic impact, national security, environmental quality, global warming mitigation, provide for the special needs of the low-income and elderly, and define the appropriate roles of Federal, state and local governments. Such a search for consensus on these issues will require hard choices to be made.

A National energy policy should be based on a concise, integrated plan for all energy sources which is designed to achieve the following objectives:

- Prioritize energy resource development, including energy conservation and energy efficiency improvements, by weighing and balancing the trade-offs between reliability, risk, and cost-effectiveness, and its effect on the environment;

- Consider the direct and indirect economic and societal impacts of developing energy resources;

- Enhance national security through diversity in energy resources, developed in an integrated and least-cost manner;

- Balance competing environmental and energy production concerns;

- Provide consistent and coherent guidance for Federal, state and local energy policy makers; and

- Define the Federal government's role as a coordinator and provider of sustained funding, technical assistance and research, development and demonstration of emerging energy technologies and techniques.

National Energy Policy Objectives

- Assure the most economic and efficient use of the Nation's resources by promoting improved energy efficiency throughout the economy focusing on the residential, commercial and industrial sectors, building technologies, transportation alternatives and residential and commercial appliances.

  Improved energy efficiency should form the cornerstone of an optimal and integrated National energy policy. The formation of National energy policy must be predicated on an integrated energy planning process that evaluates improved energy efficiency equally with other traditional supply options. Such a planning process must explicitly recognize and account for the external benefits and costs of improved efficiency by considering its environmental, economic development and societal impacts.

  Additionally, National energy policy should recognize that a new and more flexible Federal/state/local partnership must be established to translate the Nation's energy policies and priorities into state and local implementation and action. This partnership requires increased and sustained federal funding and technical assistance to continue the innovative state and local assistance programs, and energy efficiency research and development programs which have made major contributions to the Nation's efficiency gains to date.

  In the short-term, National energy policy must emphasize and increase funding at all levels for research, development and demonstration of energy efficient designs, technologies and applications which will pay future dividends in the form of new products, processes and jobs.

  National energy policy, building on recent Federal legislation, must also ensure that cost-effective energy efficiency standards are implemented for residential and commercial appliances, new building construction, manufactured homes and buildings, lighting and motors. Transportation efficiency should be encouraged by retaining and strengthening fuel economy standards for automobiles and light duty trucks as well as promoting increased use and expansion of the Nation's mass transit systems.

National energy policy should promote, when practicable, private/public partnerships in the development of innovative energy practices, techniques, and financial arrangements such as shared savings or performance contracting. The Federal Government can provide leadership by using new and more efficient energy saving technologies in procurement and purchasing practices. The Federal government should emphasize and promote the use of alternative transportation fuels, renewable energy sources and the consideration of life-cycle costing in the design, construction and purchasing of new buildings and equipment.

Also, Federal and state governments should increase outreach, technical assistance and information transfer programs to educate the public that improved energy efficiency provides the same service at lower cost, is good for business, and provides greater return on investment than a comparable investment in new energy supplies.

In the longer-term, energy efficiency resource development and demonstration budgets must be increased and joint public/private partnerships must be developed which focus on particular projects and research initiatives in the areas of more efficient appliances, transportation alternatives and alternative fuels development as well as the energy applications of super conductivity.

- Increase the contribution of renewable energy to the Nation's energy supply through consistent regulatory treatment, concerted public awareness and increased research, development and demonstration.

National energy policy must foster the development of the Nation's renewable and indigenous resource potential in an era of increasingly competitive markets, regulatory uncertainty and rising foreign oil dependency.

Rising foreign oil dependency and oil price uncertainty, coupled with the long-term environmental impacts of increasing fossil fuel use, highlight the urgent need for greater interest in renewable resource development by the Federal government. Rising petroleum imports require that Federal energy policy refocus its efforts on promoting and sustaining the use of alternative

transportation fuels, biomass, geothermal, hydroelectric, hydrogen, ocean thermal energy conversion, photovoltaics, waste, wood and wind as energy resources which can diversify the Nation's energy base.

Additionally, renewable resources and cogeneration for electricity generation should play an important role in the Nation's future energy mix. Regulatory reform at both the State and Federal levels should be considered to ensure the proper and efficient integration of these power sources into the electric utility system. Among those issue which should be analyzed are transmission pricing, appropriate access to the transmission grid, the role of competitive bidding in future generation, which fairly considers renewable resources' unique attributes and environmental benefits, and Federal/State jurisdictional issues related to transmission services and wholesale utility markets.

Renewable resource development should be given Federal tax incentives similar to those provided for the exploration and development of the Nation's fossil fuels to allow these technologies to compete on an equal footing with comparable fossil and nuclear based fuels and technologies.

Additionally, accelerated research, development, and demonstration initiatives should be funded and promoted as part of a multi-year authorization for renewable resource based projects. A multi-year authorization would serve to enhance private participation in projects which benefit the Nation's economy by developing emerging renewable technologies, thus contributing to new manufacturing activity as well as developing an exportable product for the world market.

Renewable technologies should also be an integral element of Federal, state and local capital construction projects as well as part of government procurement and purchasing programs. Additionally, renewable resource projects should be given more widespread application through the State Energy Conservation Program (SECP) and Energy Extension Service (EES) program. Greater emphasis should be placed on demonstrating innovative uses of renewable resource technologies at all levels of government to showcase practical applications of these technologies and techniques.

- Ensure a stable, economic and environmentally acceptable supply of domestic energy resources.

National energy policy must ensure that the domestic energy industry is sustained in an era of moderating energy prices so that a portion of the Nation's future energy needs can be met with domestic energy resources.

The United States possesses enormous coal reserves, has a mature and extensive petroleum and natural gas industry and has developed the use of nuclear energy to generate electricity. National energy policy must recognize that a strong domestic energy industry is vital to our national security.

To better utilize our abundant coal reserves, which have been restricted by environmental considerations, a Federal/state partnership must be established which will promote the environmentally sound use of coal through new coal cleaning, conversion and combustion technologies which satisfy stringent standards for controlling particulates, sulfur and nitrogen oxides.

To sustain the domestic oil industry and promote greater exploration and development, National energy policy should focus on tax incentives which will spur exploration and maintain marginal production. Additionally, increased research and development on enhanced oil recovery for oil fields should be vigorously pursued.

The continued growth and expansion of the natural gas industry should be a major tenet of National energy policy. Since the U.S. gas reserve-to-use ratio is significantly larger than the domestic oil reserve-to-use, National energy policy should recognize the potential for increased natural gas use throughout the Nation's economy. Increased gas use can be achieved through a more market oriented industry by regulatory reform at both the Federal and state levels. National energy policy should also remove any restrictions on natural gas use; provide open access to interstate transportation which would encourage competition and allow suppliers to balance supply and demand; and expand the North American pipeline to bring more Canadian and Mexican gas to U.S. markets, thus significantly improving the U.S. long-term gas supply outlook.

In the short term, to more fully enhance our domestic energy resources, National energy policy should encourage the FERC and other regulatory agencies to expedite the expansion of the energy supply and distribution system for natural gas as well as electricity. Additionally, to continue the safe use of nuclear energy a number of steps should be considered such as standardized plant design, as well as increased research development must be initiated to address nuclear waste disposal. National energy policy must also undertake innovative research development and demonstration to commercialize cost-effective alternative transportation fuels as a substitute for gasoline and diesel fuel.

In the near future, National energy policy must strive establish an alliance with other Western Hemisphere countries to stabilize our sources of energy supplies and decrease our reliance on the Middle East.

Further, longer-term basic research and development and demonstration should be initiated to promote environmentally sound development of all our domestic resources.

- Meet the essential needs of the Nation's low-income people.

National energy policy must explicitly recognize the special needs of low and fixed income consumers and the elderly. The growing reliance of market mechanisms to meet the Nation's energy needs must acknowledge that certain segments of the population are unable to respond to market signals. Minimal access to comfort and mobility is essential to the health and welfare of all Americans.

To assist low-income consumers in making informed energy decisions a number of policy initiatives should be pursued including: initiating a widespread energy education campaign as part of the Low Income Home Energy Assistance program, State and Local Assistance Programs such as SECP and EES, and Housing and Urban Development Low-Income Housing programs; implementing research and development initiatives designed to provide extremely low-cost housing that is energy-efficient; developing and enforcing rental-facility guidelines.

National energy policy must sustain the commitment to providing weatherization assistance and low-income energy assistance through continued Federal funding recognizing that petroleum overcharge recoveries are non-recurring sources of funds. States, through the use of oil overcharge refunds, and public/private collaboration must strive to develop innovative programs to make permanent energy savings improvements to low-income and elderly housing, thus decreasing the reliance on payments to meet continuing energy costs. The private sector and utility sponsored low-income assistance programs should also be leveraged in partnership with government programs, especially in the Weatherization Assistance Program. Existing statutory language and regulations governing the construction and maintenance of publicly financed housing should be amended to require that existing public housing incorporate cost-effective conservation improvements and that new public housing be built based on life-cycle energy costs.

Additionally, the Federal government, in cooperation with the states should compile better data and statistics regarding low-income energy needs, percentage of income spent on energy and other relevant data to better assess ways to reach this segment of the population.

In the longer-term, public/private partnerships should be forged which encourage the use of shared savings and performance contracting in public housing.

- Assure energy emergency preparedness by promoting coordination and cooperation among, national, state and local government, and the private sector.

National energy policy must clearly recognize that rising energy imports increase the Nation's vulnerability to an energy supply disruption. Reliance on the free market to meet the Nation's energy needs at the lowest cost must be tempered by the realization that the market discounts their longer-term national security considerations and energy and environmental implications to the Nation's economy. Furthermore, even with today's relative energy supply abundance, an energy supply emergency could be triggered by an act of terrorism

in our own Country which could have widespread impacts on the supply and distribution of energy. Therefore, it is the responsibility of Federal and state governments to focus on preparing a coordinated, interrelated, and flexible strategy to meet any energy emergency which mitigates the impact on the Nation's economy and balances regional effects of an energy supply disruption. Foremost in the formulation of an energy emergency response capability is the establishment of clear lines of communication and jurisdiction between the Federal Government, states, and the energy industry.

In the short term, a mechanism must be instituted on the Federal level which allows the President to respond to any energy supply disruption. A planning mechanism must be instituted which accounts for the Nation's responsibility to meet international obligations to share petroleum supplies pursuant to International Energy Agency agreement without unduly burdening any region of the Country. States should also be full participants in the International Energy Agency's Allocation System Tests.

Additionally, the Strategic Petroleum Reserve must be filled expeditiously to the one billion barrel level to provide a hedge against foreign oil producers controlling the availability of petroleum supply in the event of a supply disruption. The Federal government also must continue to test SPR drawdown procedures and the distribution of refined product at specified intervals to ensure that the product reaches the market in a timely manner. The drawdown procedures of the SPR should be amended to include only domestic companies with refining capacity as those eligible to receive crude oil from the reserve.

The Federal government also must continue its independent effort to gather comprehensive energy data with enough state level specificity to match energy use with supply, price, demand and product inventories. Also, the Federal government in cooperation with the states, should provide ongoing guidance, training and technical assistance for specific energy emergency scenarios by conducting energy emergency simulations which coordinate and delineate Federal, state and local responsibilities.

On the state and local level, state energy emergency plans must be reestablished and tested to mitigate economic dislocations and balance state and local needs. Complementary State set-aside programs must also be reestablished and revised under Federal authority to avoid misallocations of scarce energy supplies and to increase regional cooperation. The implementation of State set-aside programs should require no prior Federal approval.

In addition, State and localities must cooperatively work to provide accurate and timely energy emergency information on the availability of energy supplies, the outlook for energy emergency relief and a plan of action to mitigate the impacts of supply disruptions.

The private sector must provide expertise and advice to Federal, state and local officials on how to manage a shortage, as well as to coordinate their responses to meet energy supply shortfalls with governments efforts to manage an energy emergency.

A primary objective of a National energy emergency policy is to ensure that there is a rational, integrated and cooperative contingency plan to meet any energy supply emergency. Such a balanced policy must account for regional disparity and vulnerability while protecting the health and welfare of the Nation's citizens, businesses and industries.

National Association of Regulatory Utility Commissioners

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May 9, 1989

The Honorable Howard M. Metzenbaum
Chairman
Subcommittee on Energy Regulation and Conservation
Committee on Energy and Natural Resources
212 Hart Senate Office Building
Washington, DC 20510

Re: Testimony on S. 247, the "State Energy Conservation Programs Improvement Act of 1989"

Dear Chairman Metzenbaum:

The National Association of Regulatory Utility Commissioners (NARUC) respectfully requests that this letter be included in the hearing record on S. 247, the "State Energy Conservation Programs Improvement Act of 1989."

As the Association representing the State Commissions responsible for the economic regulation of our nation's electric and gas utilities, we have a vital and direct interest in proposals to make State energy conservation programs more effective. We are pleased to support the legislation now before you. It outlines an opportunity you have to help this country use energy in an economically sound and environmentally sensible way. We urge you to take advantage of that opportunity.

As utility regulators at the state level, our members are very concerned about funding for energy conservation programs. These programs have helped millions of consumers to minimize their utility bills and have spurred the development of many new energy-saving technologies by U.S. industries. Due in part to the wise investments made by the government over the past 15 years, energy efficiency has become the fastest growing energy source in the U.S. economy, and the most economical.

A huge reservoir of untapped energy efficiency exists. As S. 247 points out, this reservoir is capable of actually reducing our current consumption of energy. The environmental benefits which accompany that increased energy efficiency make the bill doubly worthwhile.

It is worth reminding the Subcommittee that energy use per unit of GNP declined steadily from the period between 1973 and 1986. Indeed, the energy-saving investments our country made after the Arab Oil Embargo 15 years ago saved our country $130 billion a year in energy bills. Unfortunately, this trend has begun to reverse itself over the last two years.

This leaves at least three urgent reasons to provide serious and substantial funding to energy conservation: environmental, economic, and resource preservation.

1) Environmental: the recently issued public policy study called, "Project 88", sponsored by Senators Wirth and Heinz, strongly recommended a set of policies to deal effectively with the combined problems of global warming, acid rain, local air pollution, and energy security, mainly--though not exclusively--by encouraging more efficient energy production and use of energy throughout the U.S. economy. They found that, "a comprehensive energy efficiency program will go a long way towards reducing some of our major environmental problems while providing society with a broad range of important economic benefits . . . The cornerstone of any program to fight global warming is likely to be promotion of energy efficiency and non-fossil fuel energy generation. Encouraging a more energy efficient economy will mitigate the greenhouse effect and will reduce problems with local air pollution and acid rain."

2) Economic: Insofar as economic benefits are concerned, not only must we reduce residential and business customers' energy bills but, by reducing energy bills for industry, monies are freed for use in plant modernization and expansion. It is of vital importance to our trade balance to change the current level of industrial expenditures on energy. The U.S. spends 11% of its GNP on energy supplies while Japan spends only 6%. If the U.S. were to match Japan's level, we would save $190 billion annually on energy bills with no loss in output of goods and services.

3) Resource Preservation: Finally, to the extent that we can extend the life of proven, economically retrievable but unrenewable resources, we enhance our national security and can avoid or postpone the need to explore for these resources in sensitive areas.

Surely, these reasons are sufficiently compelling to justify an expenditure at this time to ensure the continued momentum of energy conservation. How we choose to produce and use energy in the immediate future and beyond, will deeply affect the quality and viability of our environment and our economy.

We would like to thank the Subcommittee for allowing NARUC to present its views on this vital subject.

Respectfully yours,

Paul Rodgers
General Counsel

Julienne Wood
Assistant Director
Congressional Relations

BOB MILLER
Acting Governor

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WILLIAM H. VANCE
Secretary

March 23, 1989

The Honorable Howard Metzenbaum
Chairman
Energy Regulation and Conservation
Subcommittee
SH-212 Hart Senate Office Building
Washington, D.C. 20510

Re: S. 247/the "State Energy Conservation Programs Improvement Act of 1989."

Dear Chairman Metzenbaum:

On behalf of the Conservation Committee of the National Association of Regulatory Utility Commissioners (NARUC), I want to take this opportunity to congratulate you on introducing S.247. NARUC heartily endorses this legislation which updates the state energy conservation programs and authorizes increased expenditures for these important activities. NARUC is working very closely with the National Association of State Energy Officials (NASEO) on least-cost energy planning activities as well as a variety of other important national energy issues. This legislation would enhance the state energy office role in least-cost energy planning.

We as a nation are becoming increasingly concerned about global climate change and it is clear that energy efficiency programs are the most inexpensive and effective step to begin to address this significant problem.

Thank you again for introducing this important legislation and we look forward to working with you on the enactment of this bill.

Sincerely yours,

STEPHEN WIEL
Chairman
NARUC Conservation Committee

SW/mpy

cc: Mitch Beaver, Chairman, NASEO
Chuck Clinton, Chairman, NASEO Least-Cost Energy Planning Committee
Jeffrey C. Genzer, NASEO Counsel
Julienne Wood, NARUC Congressional Relations